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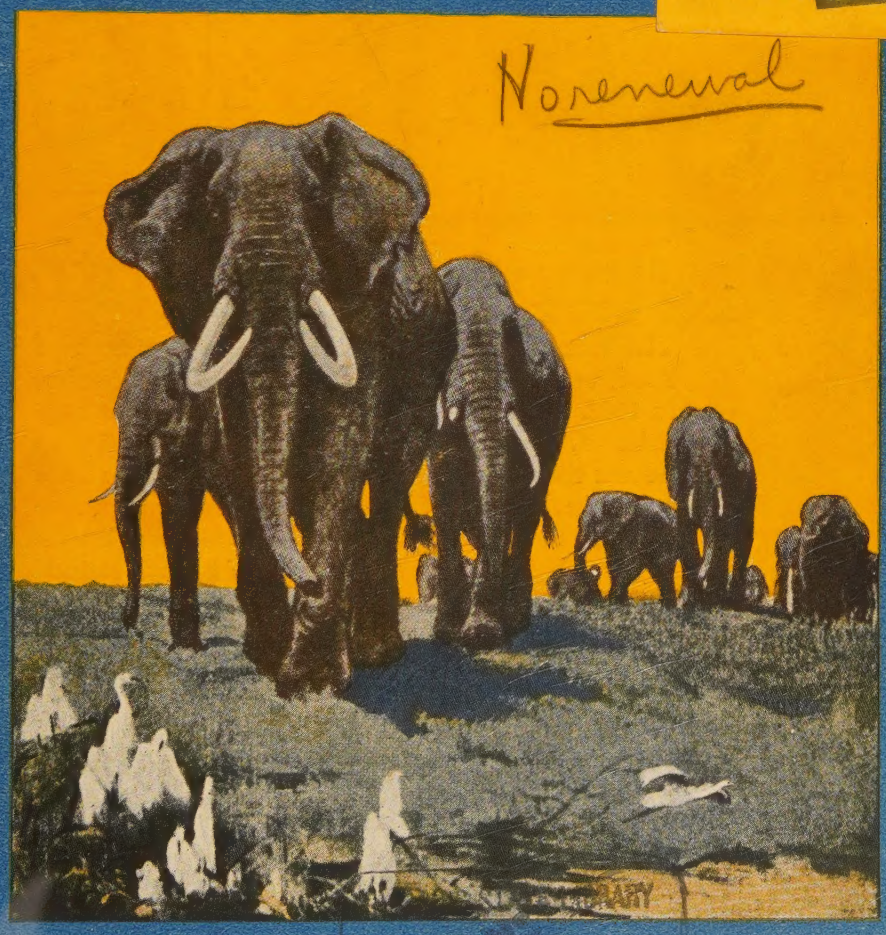

From a drawing by Winifred Austin

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ELEPHANTS IN JUNGLE, ZOO, AND CIRCUS

THE CANADIAN PACIFIC HOTEL ATOP OLD QUEBEC

BIENVENUE Á QUEBEC

June is the month

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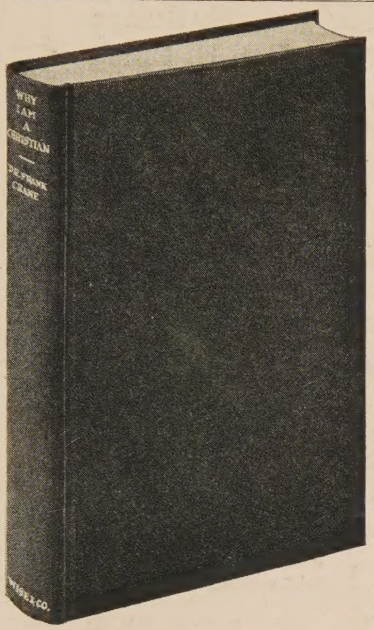

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CURRENT OPINION 50 WEST 47th STREET NEW YORK CITY

What I Think of Pelmanism—

By Judge Ben B. Lindsey

PELMANISM is a big, vital, significant contribution to the mental life of America. I have the deep conviction that it is going to strike at the very roots of individual failure, for I see in it a new power, a great driving force.

I first heard of Pelmanism while in England on war work. Sooner or later almost every conversation touched on it, for the movement seemed to have the sweep of a religious conviction. Men and women of every class and circumstance were acclaiming it as a new departure in mental training that gave promise of ending that **preventable** inefficiency which acts as a brake on human progress. Even in France I did not escape the word, for thousands of officers and men were *Pelmanizing* in order to fit themselves for return to civil life.

When I learned that Pelmanism had been brought to America by Americans for Americans, I was among the first to enroll. My reasons were two: first, because I have always felt that every mind needed regular, systematic, and scientific exercise, and, secondly, because I wanted to find out if Pelmanism was the thing that I could recommend to the hundreds who continually ask my advice in relation to their lives, problems, and ambitions.

Failure is a sad word in any language, but it is peculiarly tragic here in America, where institutions and resources join to put success within the reach of every individual. In the twenty years that I have sat on the bench of the Juvenile Court of Denver, almost every variety of human failure has passed before me in melancholy procession. By *failure* I do not mean the merely criminal mistakes of the individual, but the faults of training that keep a life from full development and complete expression.

Pelmanism the Answer

If I were asked to set down the principal cause of the average failure, I would have to put the blame at the door of our educational system. It is there that trouble begins—trouble that only the gifted and most fortunate are strong enough to overcome in later life.

What wonder that our boys and girls come forth into the world with something less than firm purpose, full confidence and leaping courage? What wonder that mind wandering and wool gathering are common, and that so many individuals are shackled by indecisions, doubts, and fears?

It is to these needs and these lacks that Pelmanism comes as an answer. The "twelve little gray books" are a remarkable achievement. Not only do they contain the discoveries that science knows about the mind and its working, but the treatment is so simple that the truths may be grasped by anyone of average education.

In plain words, what Pelmanism has done is to take psychology out of the college and put it into harness for the day's work. It lifts great, helpful truths out of the back water and plants them in the living stream.

As a matter of fact, Pelmanism ought to be the beginning of education instead of a remedy for its faults. First of all, it teaches the science of self-realization; it makes the student *discover* himself; it acquaints him with his sleeping powers and shows him how to develop them. The method is *exercise*, not of the haphazard sort, but a steady, increasing kind that brings each hidden power to full strength without strain or break.

Pelmanism's Large Returns

The human mind is *not* an automatic device. It will *not* "take care of itself." Will-power, originality, decision, resourcefulness, imagination, initiative, courage—these things are not gifts but results. Every one of these qualities can be developed by effort just as muscles can be developed by exercise. I do not mean by this that the individual can add to the brains that God gave him, but he can learn to make use of the brains that he has instead of letting them fall into flabbiness through disuse.

Other methods and systems that I have examined, while realizing the value of mental exercise, have made the mistake of limiting their efforts to the development of some single sense. What Pelmanism does is to consider the mind as a whole and treat it as a whole. It goes in for mental team play, training the mind as a unity.

Its big value, however, is the instructional note. Each lesson is accompanied by a work sheet that is really a progress sheet. The student goes forward under a teacher in the sense that he is followed through from first to last, helped, guided, and encouraged at every turn by conscientious experts.

Pelmanism is no miracle. It calls for application. But I know of nothing that pays larger returns on an investment of one's spare time from day to day.

(*Signed*) Ben B. Lindsey.

Note: As Judge Lindsey has pointed out, Pelmanism is neither an experiment nor a theory. For almost a quarter of a century it has been showing men and women how to lead happy, successful, well-rounded lives. 650,000 Pelmanists in every country on the globe are the guarantee of what Pelman training can do for *you*.

No matter what your own particular difficulties are—poor memory, mind wandering, indecision, timidity, nervousness, or lack of personality—Pelmanism will show you the way to correct and overcome them. And on the positive side, it will uncover and develop qualities which you never dreamed existed in you. It will be of direct, tangible value to you in your business and social life. In the files at the Pelman Institute of America are hundreds of letters from successful Pelmanists telling how they doubled, trebled and even quadrupled their salaries, thanks to Pelman training.

JUDGE BEN B. LINDSEY

Judge Ben B. Lindsey is known throughout the whole modern world for his work in the Juvenile Court of Denver. Years ago his vision and courage lifted children out of the cruelties and stupidities of the criminal law, and forced society to recognize its duties and responsibilities in connection with the "citizens of to-morrow."

How to Become a Pelmanist

"Scientific Mind Training" is the name of the absorbingly interesting booklet which tells about Pelmanism in detail. It is fascinating in itself with its wealth of original thought and clear observation. "Scientific Mind Training" makes an interesting addition to your library.

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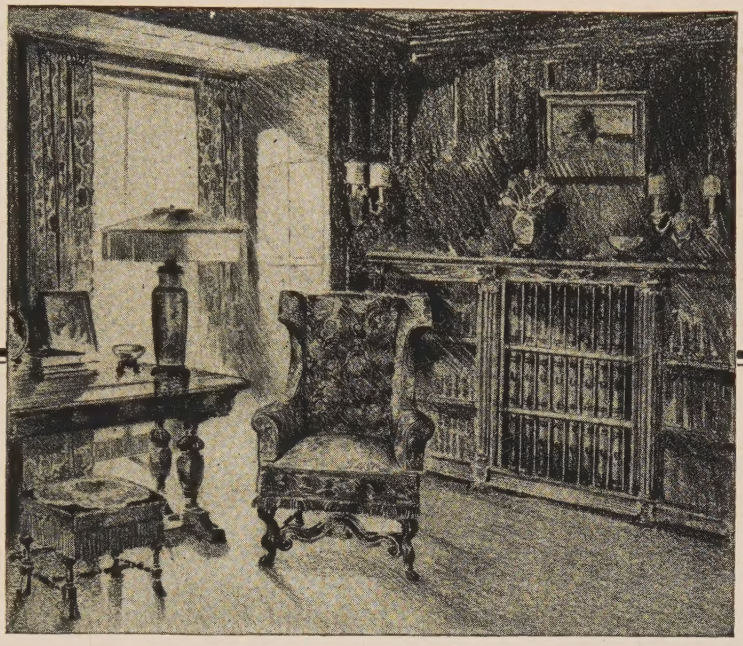

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INFORMATION FIL

THE ELEPHANT

IN JUNGLE, ZOO, AND CIRCUS

BY

DR. W. T. HORNADAY, CARL E. AKELEY, AND CHARLES MAYER

MOUNTED GROUP OF AFRICAN ELEPHANTS

Prepared by Carl E. Akeley and his assistants at the American Museum of Natural History, New York, for the great African Hall, which is to serve as a state memorial to Theodore Roosevelt. The bull elephant of the group was shot in Africa by Mr. Akeley, the female by Col. Roosevelt

IN RUDYARD KIPLING'S *story, "My Lord, the Elephant," the East Indian mahout exclaims: "God knows who made elephants. He would not kill me, except he were 'musth' (mad). Then would he kill me before anyone in the world, because he loves me. Such is the custom of elephants." The story of the elephant, wild and tame, mad and gentle, the foe of man and the friend of man, is told in the following pages.*

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SHOWING OFF THE BABY

A Ceylon elephant mother, seemingly very proud of her newly arrived offspring. A baby elephant is one of the few animals born in full possession of all its faculties. At birth, it weighs about two hundred pounds and is about a yard high. Like a puppy or kitten, it is frolicsome and playful and always willing to start a game

INFORMATION FILE

THE MENTOR

Vol. 12 No. 5 ✣ JUNE, 1924 ✣ Serial No. 256

THE ELEPHANT IN JUNGLE, ZOO, AND CIRCUS

By

WILLIAM T. HORNADAY

DIRECTOR NEW YORK ZOÖLOGICAL PARK

Courtesy Frederick Roth and Metropolitan Museum

The supreme thrill of civilized children is broadcast in one shrill and piercing cry: "The Elephants Are Coming!"

And oh, man! Never while life endures can we forget that grand and glorious feeling when we boys from the farm piled into Eddyville, Iowa, in 1861 and were electrified by that moving mountain of wrinkled gray hide, flapping ears, unbelievable trunk, and enormous white tusks known as "Old Tippoo Sahib," of the Van Amberg show. Those tusks almost touched the ground; and by that well-remembered token we know that Tippoo really was a whaling big elephant. I am sure that his equal among Indian elephants does not now live anywhere this side of India and the Far East.

Even the largest traveling shows of to-day have no such splendid old

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THE AWKWARD SQUAD ✣ Half a dozen youngsters being taught a few fancy steps in the circus' winter quarters. These two-year-olds seem willing enough to learn, but appear to have trouble coördinating their paws and trunks to the commands

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"he-ones" as Tippoo was. The showmen are afraid to carry on with them. They are too prone to go on rampages, raise Cain, and even kill visitors. People are now much more expensive than they used to be. Damage suits are easy, and, in awarding personal damages, many juries are absolutely merciless. The traveling showmen are wise, and commendable for their caution. To-day the standardized herd of show elephants, big or small, consists chiefly of modest and inoffensive spinsters, mostly immature, who earn their bread and hay by honest labor and make no fuss about The Life.

Although the Americans now have no free wild elephants of their own, they have not always been thus bereft. The time was, and that not one day more than thirty thousand years ago, that magnificent hairy mammoths from *twelve to thirteen feet high*, wandered over western Alaska, clear up to Charlie Brower's place at Point Barrow, and were trailed by the somewhat smaller mastodons. I can prove this by a fine mammoth tusk of fossil ivory that was presented to me by Alaska's delegate to Congress, Dan A. Sutherland, and by some huge molar teeth of both mammoth and mastodon coinage, from Charlie Brower.

From Alaska the great hairy mammoth marched down the west coast of North America to Oregon, California, and central Mexico. In the United States it split off two or three new star-spangled species that ranged eastward across the United States to Indiana, Kentucky, and elsewhere. The

© K. V.

CORRALLING A HERD OF WILD ELEPHANTS

One of the two methods used in capturing wild Indian elephants consists in using tamed elephants as decoys. The decoys lead the unsuspecting neophytes into a stockade, where the latter are hobbled

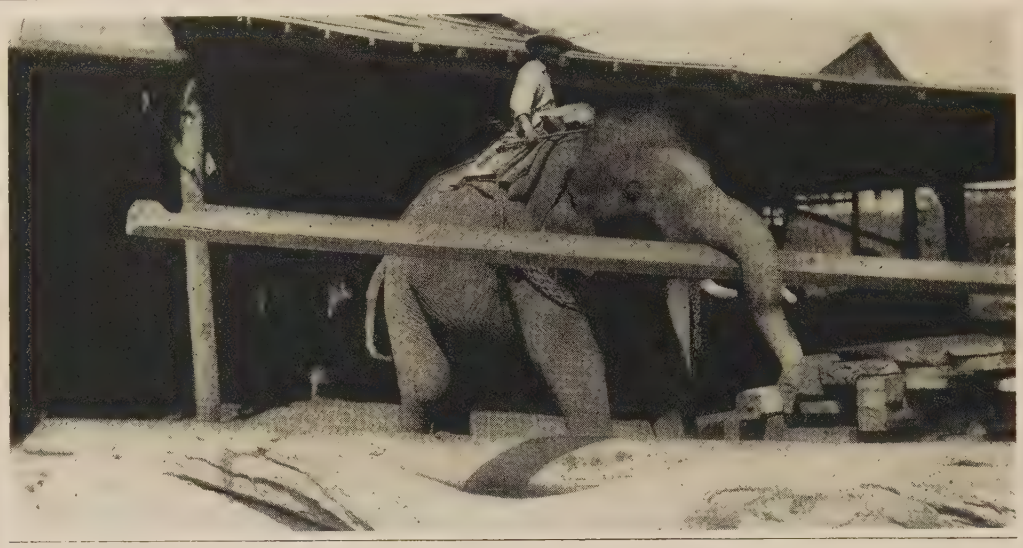
A BATH AND THEN
A REFRESHING SWIM

Elephants are excellent swimmers and can stay in the water five or six hours without touching bottom. The animals shown in the picture have just had their faces and bodies cleaned of paint used to decorate them for the durbar procession in honor of the King of England's coronation

great American mastodon also traveled south and east and finally fetched up in eastern New York, where it sank down in various bogs and safely buried skeletons of itself for the benefit of the natural history museums of 1924. The "Cohoes Mastodon" is in Albany, the "Warren" skeleton is in the American Museum of Natural History, New York.

The living wild elephants of to-day consist chiefly of fragments and remnants inhabiting shreds and patches of the interior and most remote jungles of southern, eastern, and equatorial Africa, southern India, Ceylon, Assam, Burma, Siam, French Indo-China, the Malay Peninsula, Sumatra, and British North Borneo. They have been divided by nature into two groups, Indian and African. All the elephants of Asia and Malayana are of one species only, the Indian (*Elephas indicus*), marked by small triangular ears, two huge dome-like bumps on the two halves of the forehead, five toes on each front foot and four on the hind. The body is huge and bulky, and the legs are short and thick. The tusks average much shorter and smaller than those of the large African species. The very longest Indian tusk on record is eight feet nine inches long, seventeen and one-fourth inches in circumference, and weighs eighty-one pounds. There are only four tusks on record that exceed eight feet, and in Rowland Ward's "Records of Big Game" the recorded tusks go down as low as four feet four and one-half inches.

The height of the largest male Indian elephants is involved in doubt.



A MOVABLE HIGH-POWERED DERRICK — In Asia, elephants are used for all sorts of work—pushing down trees, pulling stumps, drawing carts, and lifting and carrying heavy loads

Presumably the finest examples of the species are those that have matured in a wild state, and therefore are not measurable on the hoof. When a big elephant is dead, probably no man on earth could measure its shoulder height as it lies and hit upon the figure representing its standing height when alive. Nor is it likely that any two men could measure a dead elephant and find their figures for height in agreement. The position of the dead fore leg is a puzzle. As that member lies prone and relaxed in death, it would be almost impossible to know how much to push it up into the shoulder in order to place it just as in life.

EXPERT JUGGLING

An elephant never uses its trunk for rough or heavy work, but only to balance objects that he carries on his tusks

We know that among captive Indian elephants a male standing nine feet eight inches at the shoulder is a mighty big one. We read of dead ones that measured ten feet eight inches, and one of eleven feet, but we doubt the accuracy of the operation. As for myself, I am perfectly certain that no Indian elephant ever measured ten feet nine inches on the hoof, because that was the

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UNIFORM OF THE DAY: "SPECIAL FULL DRESS"!

A durbar at Delhi. A native prince riding in state in his elephant-drawn wagon, surrounded by his suite in gorgeous trappings

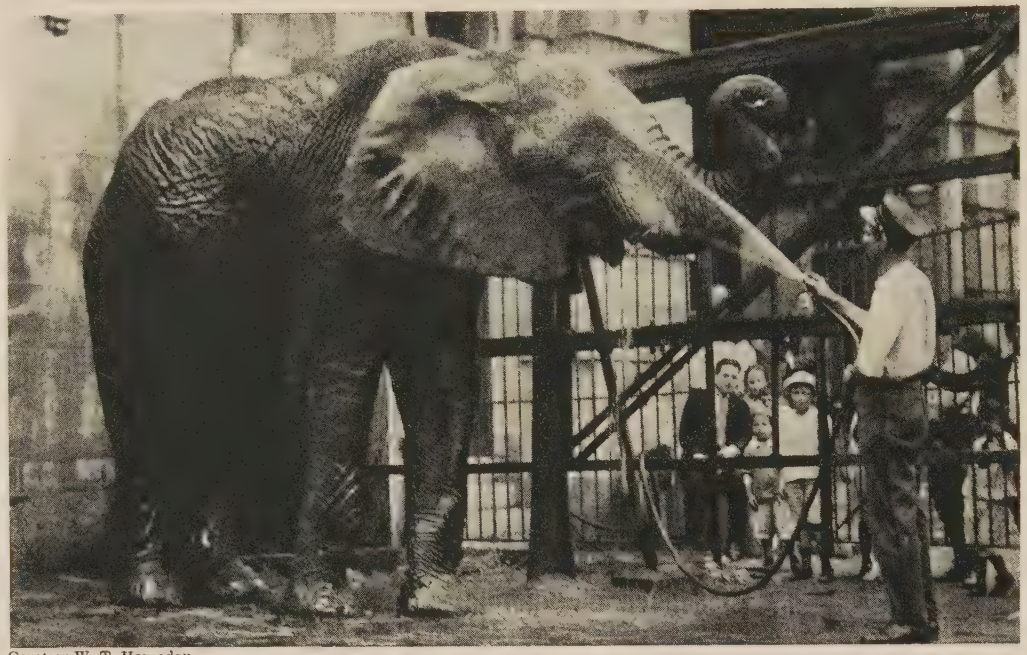
height of Jumbo, a very big African. The late G. P. Sanderson, a man of many elephants, never measured an Indian bull that exceeded nine feet eight inches.

The lozenge-shaped ridges of enamel on the otherwise flat grinding surface of the molar teeth, and also other characteristics, have caused zoölogists to erect the African elephants into an independent group known as the *genus Loxodonta*. The precise number of species that exist in this group is involved in some doubt, according to the accepted author in the case, and we will not here embark on the stormy sea of classification. It is quite sufficient for the purposes of the general reader to know that in all Africa there really are at least four or five perfectly good species of elephants. Of these at least three are huge, one is just medium, and the last one is a genuine pygmy.

HER YEARLY APPOINTMENT WITH THE MANICURIST

Domesticated elephants have their toes filed about once a year

The whaling big African elephants, like dead Jumbo and our living Kartoum, are dotted through the Egyptian Sudan and Uganda Territory, Kenia Province (formerly British East Africa), Tanganyika Territory (*né* German East), and south-



Courtesy W. T. Hornaday

KARTOUM, ✣ ✣ THE FENCE-BREAKER — One of the troublesome inmates who has given the keepers of the New York Zoölogical Park an increasing amount of anxiety

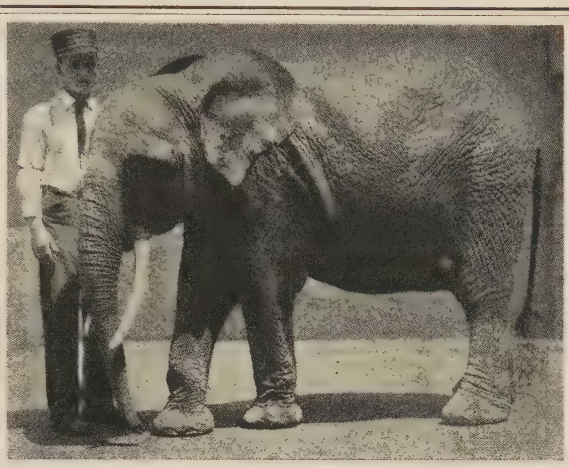
ward to Rhodesia, the Transvaal, and Natal. You must go far and hunt long to find any.

The elephants of the now famous Addo Bush represent a small species (eight feet high), and it is safe to say that no one hundred and twenty elephants on earth ever perplexed and worried a good government as much as did that particular bunch. The Addo Bush is a very small, isolated forest, quite surrounded by new farms, including numerous irrigation ditches. Pressed by shortage of food in their preserve, the elephants naturally raided the farms, seeking what they might devour. They ate much and spoiled more; and the unhappy farmers appealed to the government for relief from too much elephant in their cosmos. The government thought of relief measures. A fence all around the Bush was utterly impossible, for several reasons. Again, the elephants could not be moved without catching and crating and hauling them, which was impossible. And no one wanted elephants to work, so there were no "*keddah* operations."

The one last and most lamentable resort was to destroy all but a few of the elephants who had no place to go, and trust that a preserved remnant would not become another unbearable infliction upon the farmers. Major Pretorius was engaged to do the shooting; and, because it is everywhere a painful subject, the less said about it the better.

The big African elephants, measured from the White Nile and the Anglo-Egyptian Sudan clear down southward to Natal and the Orange River, are

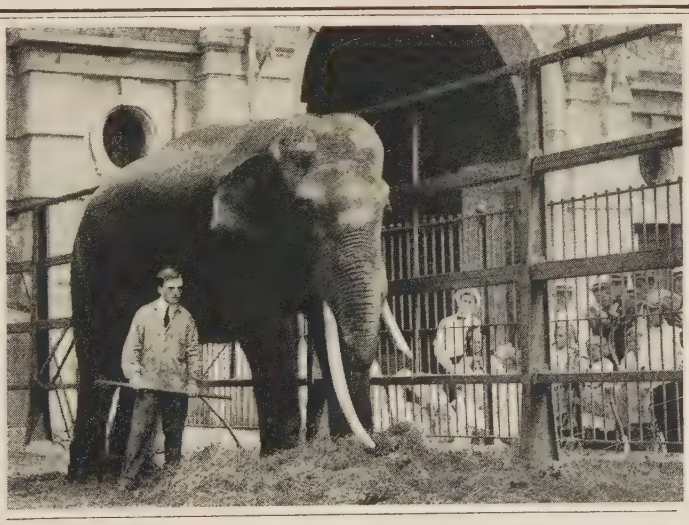
the largest of all living elephants. The longest, and the most beautiful, tusks in existence came from an elephant that was shot by an American, about twenty-five years ago, a short distance south of the Abyssinian border, and presently landed in the possession of King Menelik. By various channels they finally found their way into the ivory market of London, where they were purchased by Rowland Ward.



A WEST AFRICAN PYGMY

These miniatures of their larger cousins are celebrated for what scientists do not know about them. They belong to a distinct species of the elephant family

A very brief time thereafter they were offered to the New York Zoölogical Society, snapped up by cable, and, by the late Charles T. Barney, presented to the National Collection of Heads and Horns, in Bronx Park. The longest tusk measures eleven feet five and one-half inches, its greatest circumference is eighteen inches, and the weight of the pair is two hundred and ninety-two pounds. They are from the Sudan elephant species (named in Latin *Loxodonta oxyotis*), the colossal big-eared animal, two specimens of which have been measured (dead) in British East Africa by the two very competent American taxidermist-naturalists, Carl E. Akeley and Herbert Lang, as being eleven feet four inches standing height at the shoulders. This measurement I accept without question as being reliable.



GUNDA, WHO BROKE HIS TUSK ATTACKING HIS KEEPER

Gunda was an Indian elephant who was born bad. As a youngster he was ridden in Bronx Park, but on reaching maturity he became dangerous. After numerous attacks on his keeper he was condemned to death and shot by Carl E. Akeley

Jumbo, of the London Zoo, and lastly of the Barnum show, was carefully measured (surreptitiously) in 1883 in the show at Madison Square Garden by George Elder, a pole jumper, and Robert Gilfort, an acrobat, and found to be precisely ten feet nine

CIRCUS DAY AT BELLEVUE HOSPITAL

Each spring, when the circus comes to New York City, a sawdust ring is set up in the court of Bellevue Hospital and a free show given for all the patients. Here an elephant is shown doing what trainers say is his most difficult trick—lying down flat on his side

inches. The heaviest African elephant tusk of authentic record is one in the British Museum of Natural History, which is ten feet two and one-half inches long and weighs two hundred and twenty-six and one-half pounds.

In what is now Tanganyika Territory, Africa, there is found a species of elephant with much smaller and more regularly triangular ears than those of the Sudan species, which is known as *Loxodonta knochenhaueri*—a barbarous name to bestow upon an elephant that is too far away to put up a fight. Down in Cape Colony the Cape elephant is *Loxodonta capensis*. Over on the west coast of equatorial Africa is a third species of little-known character, but I never have been able to get a good line upon it.

Now, however, we reach the foot of the list of African elephants, and find there a species in which I feel a thoroughgoing proprietary interest. It is the now-celebrated pygmy West African elephant, the most sharply differentiated of all the African elephants. Day or night, as far as you can see one, you can recognize it by its little semicircular ears, its miniature tusks, and its five front and four rear toes. Its body is short, thick, and heavy, and it totally lacks the long-legged and rangy appearance of other African elephants.

Its tusks alone are sufficient to fix this species firmly on the rock of perpetuity. Our first pygmy accession, actually the "type specimen" on which the new species was founded, was Congo, who arrived in our midst in 1905. When he appeared to be fully grown, his height was six feet one inch and his weight was twenty-seven hundred pounds. His tusks were twenty-three inches long outside the lip, and in thickness they were about the size of a lady's wrist. Now, look at the tusks of any East African elephant of the

"WORLD'S CHAMPIONS" WARMING UP ✣ One of the most popular "stunts" in the repertory of performing elephants. All the thrills of a world's series game, including a home run by the Babe Ruth of the Elephant League, are furnished by this highly paid circus and vaudeville act

age that Congo was then (about seventeen years), and you will find them of a totally different pattern. The equation will stand precisely as follows: East African tusks are to pygmy tusks as brogans are to satin slippers.

The pygmy elephant is celebrated for what the world doesn't know about it. We have had Congo from the late lamented German Cameroon country. The last one, Tiny, still a frolicsome, winsome little girl, came twenty months ago from near Fernan Vaz, French West Africa. We know of two others that came from the lower Kassai River country, and there the trail ends. The ivory market of the Cameroon country once handled hundreds of pygmy elephant tusks, "none of them over three feet long," so said my informant; but the independence of the pygmy species was not discovered and declared until in 1905!

It seems to me that the world's elephant population of our days and times was at its maximum about 1850, or seventy-five years ago. It was then that ivory hunting was a thriving industry at "the Cape," in Natal, the hinterland opposite Zanzibar, and in all the Upper Nile countries. Those were the days of big-bore guns, two-ounce round balls of pure lead, and enormous expenditures of black powder.

On the plains of South Africa, Gordon-Cumming, a famous elephant slayer, used to shoot elephants in the shoulder, then gallop alongside them, loading and firing as he rode, until the animals either succumbed or escaped. He related how he once had to fire *forty* two-ounce balls into a single elephant before bringing it down.

The list of Englishmen who have figured in the books of African adventure as professional tusk hunters is a long one. A few of the outstanding figures of

our time are Anderson, Gordon-Cumming, Sir Samuel Baker, F. C. Selous, Neumann, and James Sutherland. There are scores of others who might be named.

In his day and time Arthur H. Neumann was a great slaughterer of elephants. In his book he relates with pride and satisfaction, as his greatest triumph, the killing of fourteen elephants in one day! Just pause for a moment and think of it. A whole herd of great but slow-growing animals, wonderful almost beyond compare, and the patriarchs of a fast-vanishing genus, wiped out of existence in one brief day, by one sordid hunter, confessedly cruel by nature—and who a little later blew out his own brains in London, and went to meet his reward.

The slaughter of African elephants for their ivory is not by any means a dead industry. It is a going enterprise to-day. Only last year (1922) the government of the Anglo-Egyptian Sudan advertised in the newspaper published at Khartoum, the capital, ivory-hunting licenses for sale in assorted sizes from ten-head permits up to one hundred! This is being done to reduce the elephant risks and damages to pioneer settlers and farmers.

Similar permits are issued for certain districts in Tanganyika Territory, wherein elephants were, and still are, unmitigated pests to the unhappy natives having *shambas* (cultivated fields) in their spheres of influence. When a herd of hungry elephants proceeds to raid a native village and eat up the whole year's crop of food, it is a mighty serious thing for the natives. Mr. Don A. Baxter, an observing American traveler and sportsman who but re-

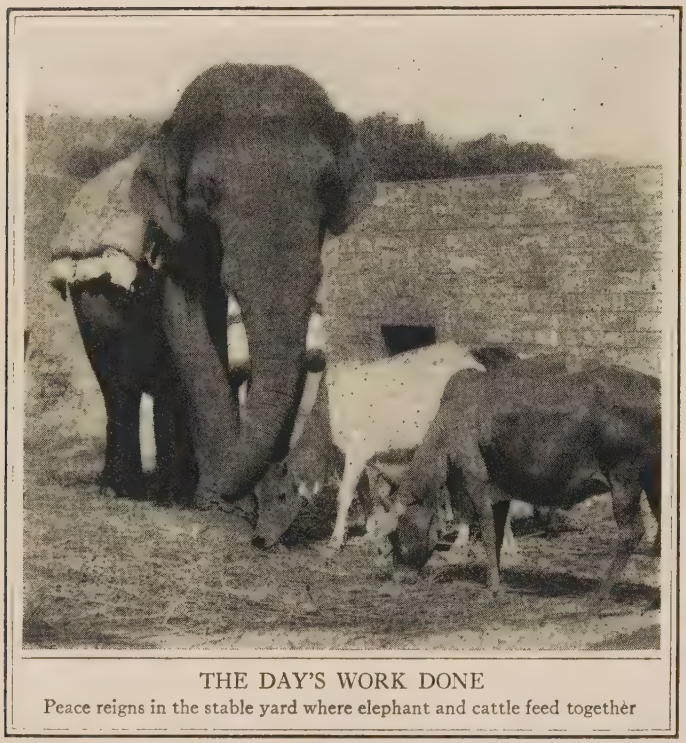
ROYAL TIGER HUNT ✣ In India, hunting tigers from the backs of elephants is one of the principal sports of the native rulers and their guests

cently returned from East Africa, states that in the Kaski District of Tanganyika there are probably about five thousand elephants, and the lot of the native inhabitants of that district is anything but a happy one. It is the cow and calf elephants that are the most industrious and persistent in clearing up native plantations.

For hunting in the elephant-ridden district, there is the "governor's license," which can be issued to kill any number of pest elephants from ten up to one hundred. In Kenia Province and Tanganyika Territory, the ordinary hunters' license is for one, two, or three elephants only, as the sportsman may elect; and the fees are in proportion. Mr. Baxter says: "The governments of these two provinces, both of which I visited, have the elephant situation thoroughly in hand. No elephants can be killed, and not a tusk of ivory can be exported, without the knowledge of the government concerned; and no tusk or elephant trophy or specimen can be shipped out unless it bears the government stamp. If a tusk weighs less than thirty pounds, it cannot be exported." To me there is less of real sportsmanship and less of keen enjoyment of the chase in killing an elephant than in any other big-game hunting in Africa known to me. When I killed a big old bull elephant, I felt as if I had cut down a giant oak tree a hundred years old that no effort of mine ever could replace.

In speaking of permits and fatalities to elephant hunters, by way of illustration, Mr. Baxter related a harrowing bit of recent jungle history. While en route to Mombasa he was offered by a Mr. Allen Black one half of a

BEFORE ✣ THE HUNT — Forty-five elephants lined up for inspection before starting out to hunt tigers in the jungles of India



THE DAY'S WORK DONE
Peace reigns in the stable yard where elephant and cattle feed together

one-hundred-elephant permit good for use on "pest" elephants in Tanganyika, where the natives of the ravaged districts wanted him. Mr. Baxter elected to go on an old-fashioned collecting trip in Kenia Province, on a two-of-a-kind basis. Eventually Mr. Black's permit was divided, one half being given to a Captain Townley and the other to a Mr. Hearst. When about two weeks out, Captain Townley lost his life through the accidental discharge of the rifle carried by his gun bearer. A few weeks later Mr. Hearst was caught and killed by a big bull elephant that he was attempting to bring down.

Mr. Baxter says that "if governor's permits are not given out too freely, the wild elephants of East Africa will not be wiped out in the next hundred years." Truly, this is good news.

In South Africa, only the remnants of former elephant abundance now remain. In the Belgian Congo Territory and in French West Africa, there seems to be no surplus elephant population, and no such elephant ravages as there are to cope with in the Sudan and in Tanganyika Territory. The officers and members of the admirable and active London Society for the Preservation of the Fauna of the British Empire have for years been pressing the British Government, and all other governments owning colonial real estate in Africa, to stop all systematic slaughter for ivory alone, to stop the killing and marketing of elephant tusks of small size, to make government game preserves (there are already about a dozen such), and, in short, to do everything that ought to be done to preserve properly and sensibly the greatest game of the greatest game continent of the world.

At present the excellently managed protected elephants of India—in Mysore, the Wynaad Forest, Cochin and the Animallai Hills, Ceylon, Burma, and Siam—seem to be in a good state of conservation. They are regarded as valuable state assets, and are treated accordingly. The day of the work elephant, in the timber forest and on the rough jungle road, has by no means passed. The annual elephant fair and auction that regularly is held

a short distance north of Calcutta still attracts about two thousand salable elephants each year, and makes an important event in Indian elephant history.

The training and working of elephants is one of the most fascinating chapters in the lore of wild-animal intelligence and training. Without loss of time I hasten to assure the reader that the officers of the Belgian Government, diligently working in the far interior of the Congo Territory for the past twenty years, have conclusively proved that the African elephant *can* be successfully caught and trained to service, along lines substantially parallel with those pursued with the Indian species. Unfortunately, however, the African blacks have not the slightest foundation of tame-elephant tradition and inherited elephant knowledge on which to build, and the Belgian officers found the Upper Congo negro as difficult to tame and train as the wild elephants of the jungle.

In India, the elephant-loving natives have for countless generations been catching wild elephants by wholesale trapping operations, breaking them, training them, and working them as regularly as horses and oxen. Elephant breeding is not pursued, for the very good reason that the process of rearing elephants from birth to adolescence is too slow and too expensive. It is a

EAR MUFFS, OVERCOAT, AND OVERSHOES

In Canada, Horatius finds himself far from the tropical heat of his native India. He doesn't object to a morning stroll through the icy streets provided he can wear the comfortable winter outfit which his owners have furnished

THE WORLD'S RECORD TUSKS
The longer tusk measures eleven feet five and a half inches in length and has a circumference of eighteen inches at the base. These are the tusks mentioned by Dr. Hornaday on page 9

hundred times more expeditious and economical to build a *keddah*, catch a whole herd of adult elephants in a few days, and in six weeks or so train them and put them to work earning an honest living. The shameless manner in which members of the Elephant Alumnæ Association cajole and bamboozle the newly caught wild elephants in the *keddah* (capture pen) while the noosers get their ropes around the feet of the wild ones without being killed is rather shocking to the high judicial mind. Without the use of tame elephants as decoys the capture and breaking of the wild ones would indeed be a tough job.

It is at this point that the most marvelous feature of the elephant mind comes to view. Here it is:

Without any exceptions, *every* wild Indian elephant quickly learns that mind is superior to brute force, that it is wisest to accept the inevitable, and to become a cheerful and dependable civilized worker. This is not equally true of any other adult wild animal with which we are acquainted. Of chimpanzees, orangs, baboons, monkeys, lions, tigers, leopards, and bears, the individuals captured when fully adult are practically impossible for training. Of those species it is only the most intelligent individuals, reared from childhood in captivity, who respond to training, and are worth the effort to train them. In all those species, and also including horses and dogs, stupid individuals are common, and all such have to be discarded. Now, is it not remarkable that *every* elephant can become a trained performer?

The normal elephant has a sanguine and serene temperament, his nerves are not jumpy, his perceptive faculties and his memory are keen and precise, and his patience is infinite.

The number of things that an Indian elephant can be taught to do, and do correctly, is limited only by the mental capacity and industry of his trainer. Some of the elephant "acts" this day on the American vaudeville stage are simply marvelous. And the end is not yet. When some particularly ambitious and intelligent trainer by and by appears before the public with an

elephant who can take a piece of chalk and write words upon a blackboard, we will not be at all surprised. I am sure that it can be done, and in the near future.

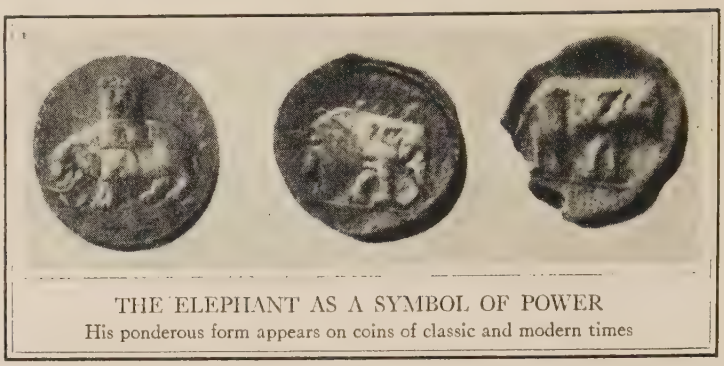
The most fascinating wild-animal sight of all India is a group of elephants at work on a busy day. Once upon a time (the time of my life!) it was my good luck to see, week after week, a lot of work elephants performing their daily tasks. Not only did I see them in the timber forest and on the trail, but once I lived for about two weeks in a bamboo hut in a big camp of working elephants. The old white-bearded "elephant doctor" was my best friend. Each morning the whole detachment (about thirty head) fell into line in front of the cook's hut to receive, each one, a huge ball of boiled rice and a small lump of horrid brown sugar. Then they were marched down to the little mountain stream and permitted to drink. After that, they broke up into detachments, and each one briskly marched away into the jungle to where teak logs had been cut, hewn, and made ready for dragging.

The business of the elephants was to drag those big square logs, each with a "drag hole" cut at one end, over the moist and slippery floor of the forest to the top of a two-thousand-foot slide. There the workmen start the logs down the granite mountain side to the edge of the level plain below. I have seen some logging operations, but never anywhere else have I seen another trick turned like that.

In getting those logs in position at the top of the chute, the elephants knew as much about the business as the men. On account of the primitive manner of dragging, the elephants came into far closer touch with their mahouts than do elephants who drag by means of comfortable collars and traces. A big rope of soft bark was tied into the drag hole of a log, the elephant took the frayed-out other end between his molar teeth—crosswise, to bring all eight molars into action—and thus gripping the rope, with the head turned partly to one side, he heaved his great bulk forward, and the log had to follow or smash. But I never O.K.'d that method. It was unbusinesslike and unfair. It

WHAT A "FULL DINNER PAIL" MEANS TO AN ELEPHANT

This fellow is bringing home his own supper. His diet consists chiefly of grasses, succulent stalks of bamboo, cocoanut, and the bark of some trees. A hearty meal for an elephant weighs about a quarter of a ton



THE ELEPHANT AS A SYMBOL OF POWER
His ponderous form appears on coins of classic and modern times

put a very improper strain on the neck vertebræ and muscles; and, besides, the elephant in the case could by no means exert all his potential strength.

In the East Indies the work elephant and his mahout are just partners in the day's work. The wise animal kneels to receive his pad and his load; and he rarely kicks about the classification of the freight. It may be crates of live chickens, field artillery, and ammunition; food, liquors, live sahibs and memsahibs, or dead tigers: it is all the same to him. He will even take on a howdah with a green sportsman in it, and go out to hunt tigers in grass seven feet high, at the imminent risk of being shot by his own bronco sportsman or some other one.

If it is your elephant's first tiger hunt, and the first tiger put up is only wounded, and starts to climb up your elephant's trunk to reach both mahout and sportsman, your elephant may lose his nerve and bolt for the rear; in which case that section of the hunt may terminate against a stout overhanging branch of an unlucky tree. The seasoned elephant, however, who has good courage and has hunted tigers before, is not stampeded by a furious tiger climbing up his head, and the hunter in the howdah then has a fair chance to shoot the tiger off its perch.

The achievements of actor elephants on the stage and in the show ring are well known. Some of them are marvelous exhibitions of keen and correct understanding, accurate memory, perfect obedience, and mechanical skill.

In our eighteen years of elephant maintenance and display in the New York Zoölogical Park, we have had few difficult cases. Gunda, a male Indian elephant who was born bad, grew up worse, and ended the worst of all elephants, is well known individually and by reputation to millions of people. For a time, while in his teens, he was amenable to reason, was ridden all about the park, and carried thousands of visitors on his back. But on reaching full maturity he became dangerous, and the last five years of his checkered life were devoted to efforts to kill certain marked victims.

When finally I sounded the depth of Gunda's unhappiness, and measured the length and breadth of his determination to "get" his keepers, Walter Thuman and I went out for a quiet walk in the park while Mr. Carl E. Akeley, the elephant collector and sculptor-taxidermist, neatly and skilfully put poor old Gunda out of the way.

Our female Indian elephant, Alice, is erratic and hysterical whenever she is taken outside of her private park, and her specialty is wildly bolting into

buildings that were not built for her. For an elephant this is in bad form; and once, when she bolted into the Reptile House, it jarred our nerves. Since that stirring event, wherein about eleven small snake cases were smashed, Alice has been officially under arrest and confined to her quarters. But she bears no malice, and seemingly has no thought of attacking anyone.

A word in conclusion about the chance of the elephants of Africa to survive the present mad craze for the slaughter of big game.

Into the high, open, and healthful plateau regions of eastern Africa white settlers are going, intent upon making farms and homes. The colonial governments of Africa will not countenance interference with or injury to those pioneers by destructive wild elephants. As between elephants and settlers, the wild beasts will have to give way. But there should be no wild hysteria of elephant killing because in a few places there is some excuse for it.

We hold that, in order to provide mounted specimens of elephants for museums the killing of a few elephants is justified. A sportsman when furnished with a permit to kill an elephant should be required to pledge himself to save its skin, skeleton, skull, or head to be mounted and placed on exhibition in a public museum.

We are assured that the Belgian Government is now considering the measures that should be taken to conserve and protect the valuable wild animals of its Congo Territory.

There is one danger of which all elephant-owning countries in Africa must beware. That is the owning and use of modern high-power rifles and fixed ammunition by natives. I speak of it here because of the new modern rifles recently obtained by the Arctic coast Eskimos, who, with them, *already* have exterminated the muskox of the Canadian Barren Grounds, save an estimated one hundred or less.

REMBRANDT'S CONCEPTION OF A YOUNG ELEPHANT
From an etching made in 1637

A hundred years from now Africa will be swarming with white people, gridironed by railroads, crowded with automobiles, and dotted all over with cities and towns. Then there will be five million rifles and pump-guns in use, and one or two of the Africanders who have no commercial interests at stake will be regretfully writing about "Our Vanished Game."

Courtesy Carl E. Akeley

AN UNEXPECTED VISITOR ✣ ✣

An elephant cow of the Uganda which came within excellent photographing distance, but a little too near for the photographer's peace of mind

CARL E. AKELEY AND HIS WORK

NATURALIST, BIG-GAME HUNTER, TAXIDERMIST, SCULPTOR, AND INVENTOR

"The African elephant is a hard fellow to know. Civilization may tame him, but it will never thoroughly understand him."

So Carl E. Akeley recently expressed himself. The artist-naturalist has made four trips to Africa—once as the companion of Theodore Roosevelt. Probably no other man has studied the African elephant so closely. He goes to Africa primarily to observe and only secondarily to hunt, and his reason for hunting is that scientific collections may have specimens of the animals that are becoming extinct.

"Only the elephant, the Cape buffalo, the rhinoceros, and sometimes the lion will attack unprovoked." When Carl Akeley tells you that, he tells something he did not learn in a book. He has been all but crushed by an elephant that went for him like a terrier after a rat. He has choked a leopard to death, with one hand at its neck and the other, mangled, down its throat. He has shot four of a band of five gorillas led by a three-hundred-and-sixty-pound patriarch. He has had extraordinary experiences with other wild animals, and each one has contributed to his fund of knowledge.

Courtesy Martin Johnson

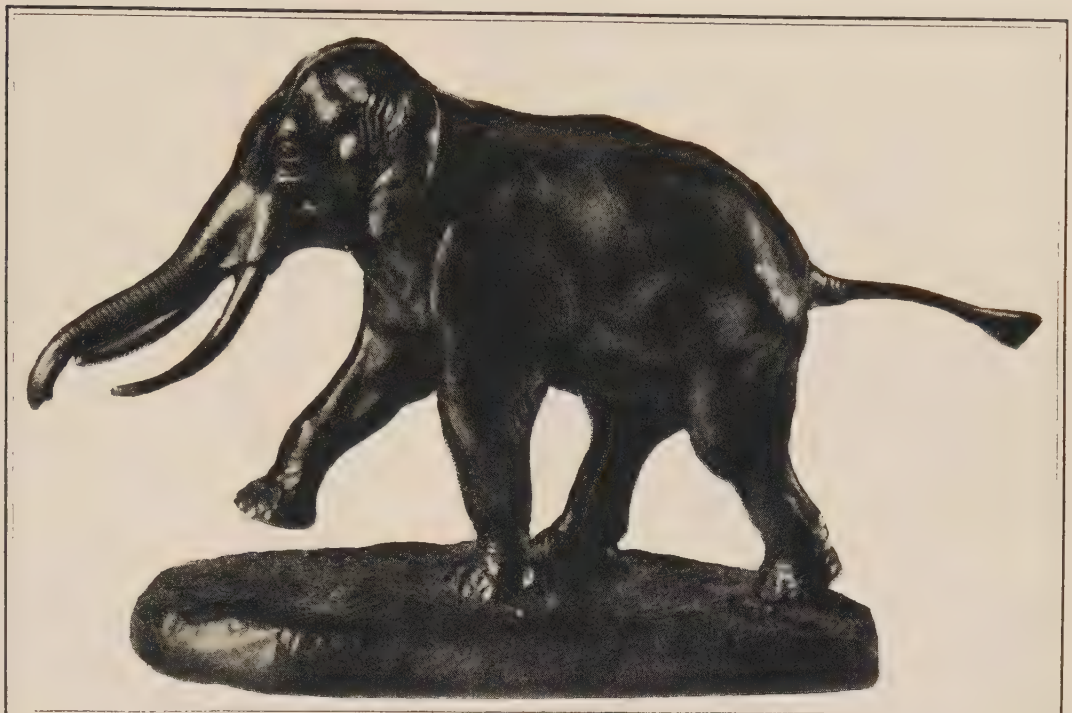
THE THRILL OF A LIFETIME

On the plains of British East Africa, two huge elephants making a preliminary survey of the situation. Shortly after this photograph was snapped one of these two tuskers threatened to charge Mrs. Johnson, who is standing with her rifle at the ready

Of all the beasts of Africa, however, the elephant is his favorite. That the American Museum of Natural History in New York and the Field Museum of Chicago have huge mounted groups which will stand as monuments of jungle life when there is no longer jungle or elephant is due not only to Carl Akeley's study of animals in their home but also to his creation of a new method of taxidermy. It was for this that he studied sculpture, and as a sculptor, too, he has won celebrity with bronzes that show the elephant charging or at play—moments in the beast's life observed at close range. From his studio in a wing of the American Museum of Natural History, New York, he directs a corps of sculptors, castmen, and taxidermists employed in the Department of Preparation.

The African elephant, larger and wilder than the Indian, has more character. He is as susceptible of training, Mr. Akeley believes, but conditions have not been the same in Africa as in India. "Elephants are costly as work animals; training them as mounts is a prince's game. There is one farm in the Congo where sixty elephants have been at school for ten years or more, but that is an experiment. Only a few African elephants have been brought to America alive. (There is a big one in New York, and one in Washington.) There is no good in studying the elephant in captivity; he deteriorates mentally and even physically. In the wild his trunk may measure seven

"AFRICAN ELEPHANT RUNNING," By the celebrated French sculptor, Antoine Louis Barye



"INDIAN ELEPHANT RUNNING," By Barye
Note the difference in the skull formation, the ears, and the shape of the tusks

feet round at the base between the tusks; in captivity it shrinks to possibly half that.

"The elephant at home never lies down: that, at least, is true of all the races of elephants with which I have worked. Even when he is standing he shifts his feet constantly. I have seen only one bit of flattened grass where an elephant had lain, and that one we traced: he lay down to rub his back, which was inflamed from an arrow. His leg and foot are constructed to be tireless. The foot is cushioned, heavily corrugated. I brought home one foot which measured sixty-seven and one-half inches round the sole. The heel of this one had been worn smooth. The ear of this elephant measured seven feet five inches by four feet six inches: I made a table top of it.

"And consider the trunk—next to the human hand, the most wonderful of all anatomical mechanism. It is a network of muscles; you could not count them. The tip is as sensitive as a surgeon's fingers, but the elephant can pick up a ton as easily as a pin. If he lost four inches off the tip he would be a goner; he could not adapt himself to browsing in time to save his life, and it is unlikely that his friends would help him."

Elephants do aid one another, however. "The Wounded Comrade," one of Mr. Akeley's bronzes, shows a tottering bull being led from the field, supported by another of the herd on each side: it is based on an incident related to Mr. Akeley by another hunter. He himself has seen the cows of a herd

JUNGLE SPORTS
Two young elephants, three-quarters grown, at play in the African forest

trying to lift with their tusks a bull that had fallen under a shot. It was in 1911—during a hunt of a year and a half for a big bull for the Museum of Natural History's groups—that squeals and trumpetings told Mr. Akeley's party that a big herd was drifting by in the forest.

"Twenty or thirty stalked from a gully; their bodies shone with fresh coats of mud and water. We followed. The trails crisscrossed. Then a band of a dozen or so got our wind and passed at close range. They were in a clearing of, say, two hundred to five hundred yards, with a bit of the forest jutting into it. All told there were probably twenty-five there, in close formation. It was there, before I fell back to an ant hill fifty yards in the rear, that I shot the bull. Some of the cows closed around him, trying to get him up with their tusks, while others skirmished in a circle, rushing with their trunks extended, trying to get my wind. That bull, when we measured him, stood eleven feet at the shoulders."

It was on that same trip that Mr. Akeley was knocked down and all but gored: that was the time his ribs were crushed.

"Sooner or later," he says, "every elephant hunter 'gets his.' I have never known two men to be killed the same way. One man I knew was tossed into the brush from a cow's tusks; another was speared with the tusk and lived to get home. Some are crushed by being sat upon. When an elephant is wounded he always returns to the attack, and if he knows he is being hunted he lies in wait like a rock: he is no more conspicuous in his own country than a rabbit in its own. He is the color of forest shadow. And he is not only intelligent, but vindictive.

"The one that nearly got me was a bull. I had cut him out of the herd and followed his spoor. He got my wind and waited: I was almost within trunk-length of him when he bellowed and charged. I saw his trunk and his eyes as he knocked me down. But I had the luck to grasp one of his tusks. He tried to impale me: I swung between the tusks as he lunged, and the tusks

drove into the ground. His nose touched me—and more. It was like being used for an elephant's prayer rug. The whole thing, from his charge till I went unconscious, was over in four or five seconds. What was it like? Well, I suppose like being hit by a motor truck."

Akeley's guide, who had the elephant gun, had fled: the main camp was twenty miles away. Four hours later Akeley came to. He had not been touched by his boys: he heard them, a few feet off, mourning his death. They jumped when he called. He was laid up for weeks—and the Mount Kenia country lacks hospitals. Akeley's chief concern was whether he had lost his nerve. His first venture on recovery proved that he had not. A wounded bull charged him four times but finally fell.

"The elephant," Mr. Akeley continues, "does not charge in blind rage, like a lion. He has a mental reserve. When hit, he pauses not only because of the impact of the bullet, but to consider. No other animal attacks the elephant: when tigers attack elephants in India, there are men riding them. Lions may attack baby elephants, but the herd does not tolerate lions in its own territory: it drives them out.

"Once the elephant, I am convinced, was as much a plains animal as a forest animal, but it has kept to the forest more since man came. Except for the elephant paths, travel in the forest would be impossible. The herds go everywhere except in the tree-fern patches. They change their paths

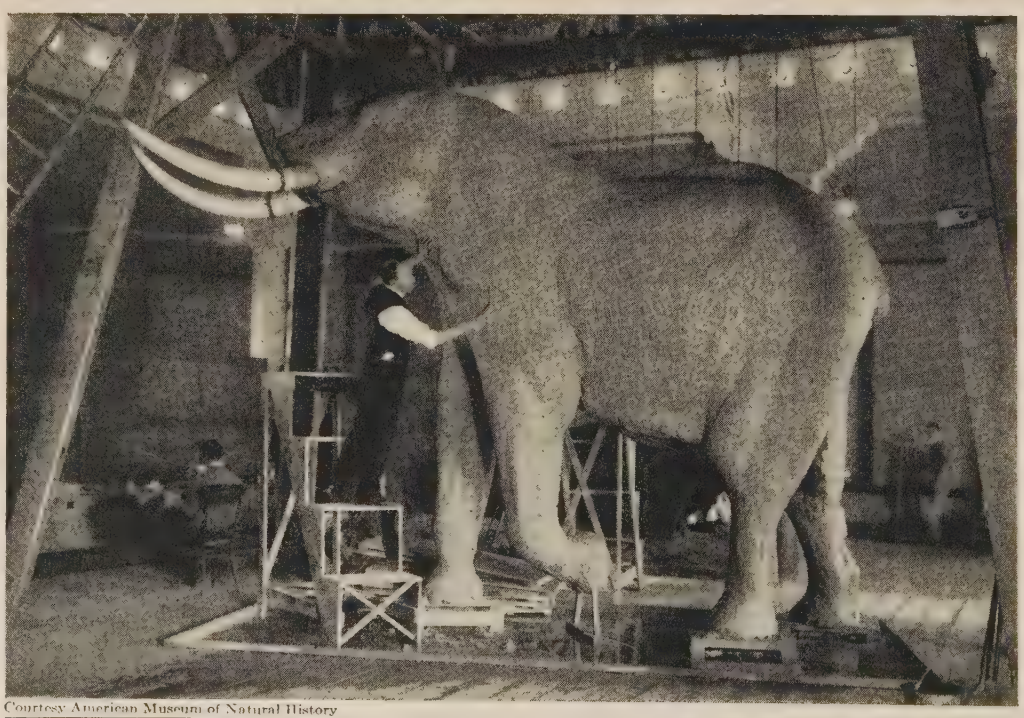
Courtesy Martin Johnson

SURPRISED AT THE WATER HOLE ✣ A solitary elephant enjoying the refreshing coolness of his favorite water hole, little suspecting the close proximity of the deadly "fire stick" of the hunter

perhaps because the natives put traps in pits: wickerwork with a rawhide cable noose and the end hitched to a short log. The animal steps into the pit and is hobbled by the log; he runs slowly and is followed till he is tired. There are paths which cannot be changed, however, because of the lay of the land, and in the mountains I have seen such trails worn six inches deep in the rock. They have probably been used for centuries. Sometimes, at a ford, you will see elephant paths converging from all directions; and in the forest, when for one reason or another the trail is not altered, big trees are rubbed half through by the beast's flanks.

"I have been in the middle of a herd of seven hundred—that is large, though men have told me of having seen herds of two thousand on the Nile—and have heard them all day, but saw them only for a few moments. And I have listened to the wind of a running herd: it was dry weather, but there was only this rustle, which followed an instant of dead silence when one of the elephants got my wind and screamed. Till then there had been a riot of noise: monkeys, birds, everything. Then not a sound. Then the swish of the herd, but no footfall. It was like a great wind. If it had been damp, even from dew, and with no dry twigs and leaves, there would have been no noise at all."

His fifteen minutes of observation before they took alarm was worth a



Courtesy American Museum of Natural History

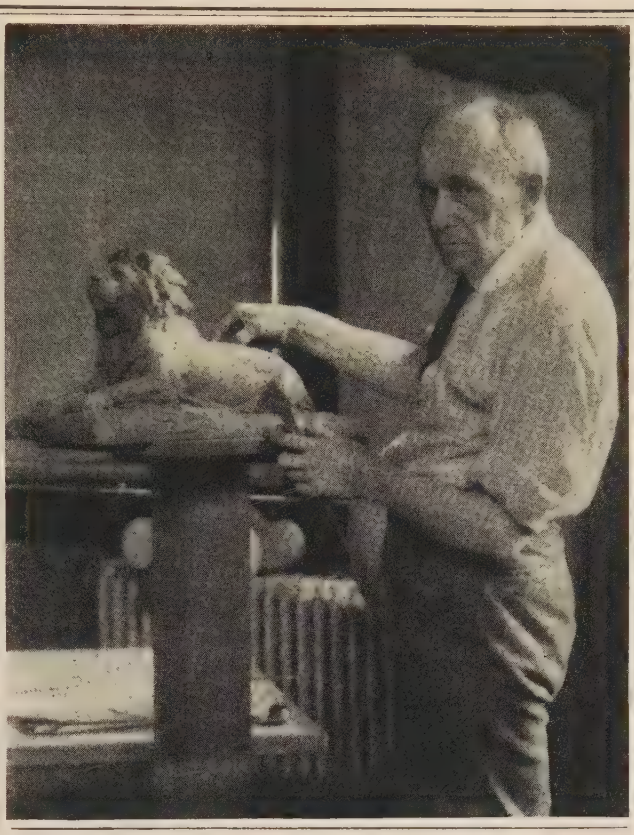
MODELING A LIFE-SIZE ELEPHANT

Carl Akeley's studio is located in a wing of the American Museum of Natural History. Here he supervises the work of the sculptors and taxidermists of the Department of Preparation in mounting groups that will exist long after the last beast has disappeared from the jungle

lifetime, says Carl Akeley.

Scent gave the alarm then. No animal is more sensitive to scent. Elephants are reputed to have bad eyesight, although they have charged Mr. Akeley at two hundred and fifty yards without the wind.

He has stood on an ant hill awaiting the attack of eleven of these beasts which hunt only man, and he has spent a day following a bull which took twenty-five shots to end. He brought to America the biggest elephant hide ever to arrive here: a dozen men could stand inside it. He came through many a close shave with elephants and lived to write in his book, "In Brightest Africa":



CARL E. AKELEY IN HIS STUDIO

Surrounded by others of his wild animal studies, he is working on a piece of sculpture for the proposed African Hall. One of the groups to be represented is the lion hunt

"I have watched them in herds and singly, studied their paths, their feeding grounds, everything about them I could, and I have come to the conclusion that of all the wild animals on this earth now the African elephant is the most fascinating, and that man, for all the thousands of years he has known of elephants, knows mighty little about him."

When an elephant is killed in Africa the chiefs from round about come to ask for the meat. That is one reason a native's living expenses are—or were before the war—only fifteen cents a month. Most of the killing, of course, is for the tusks, which sometimes weigh over two hundred pounds, though half that is large. It is a job to skin a seven-ton elephant: it takes as many as a hundred men, including those who build the drying huts. Camp is made where the game falls. The hide is taken off in three sections. It weighs two thousand five hundred pounds. Fifty or a hundred natives are needed to turn the carcass over in the stripping process. The hide, two inches thick, is shaved to a quarter of an inch, salted, and dried under trees or in the huts—never in the sun. Then it is rolled and wrapped against chafing and shipped in zinc-lined boxes. When the time comes to mount it, it is made flexible by soaking in salt water.

The elephants, like all of Africa's animals, are becoming fewer. The lion, says Mr. Akeley, will be the last to be exterminated: it may first become a pest. The gorilla is to be given some degree of immunity: the Belgian Government has asked Mr. Akeley to map out a sanctuary for these apes in the Congo.

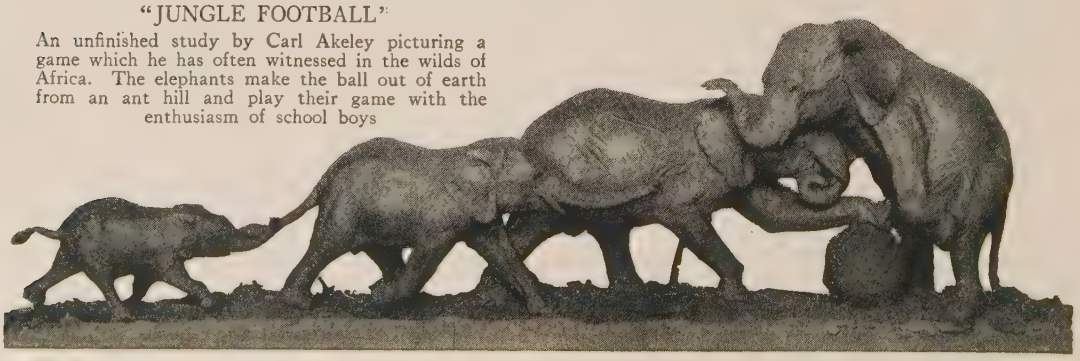
Mr. Akeley's position is unique in the fields of science and art. He is a student, a hunter, an expert taxidermist who has revolutionized that art, and a sculptor of fame.

At the Chicago World's Fair in 1893 he and a friend, a doctor, looked at a piece of sculpture showing a man and a bear fighting to the death. Akeley, who was then working out his realistic method of taxidermy, discussed with the doctor the feelings of the man in the bear fight. Did he feel pain? Years later, Akeley fired at a leopard and wounded her. He shifted his position beside the "tug" (a dry watercourse on an African desert). He had one cartridge left: while he tried to load, the leopard sprang. They grappled: Akeley got the beast beneath him and with his arms spread her scratching forelegs. He dug his knees into her diaphragm. One hand grasped her throat; the other she held in her jaws. As she chewed he heard the muscles of his arm rend, but he felt no pain, save at the base of the thumb. "Well," he thought, while he tried to tighten his hold, "I know how that fellow felt in the bear fight. Now I know all about it, but it won't do any good, because I'm done for, and I can never tell the doctor." Then he gripped tighter, inside the throat and outside, and when it seemed he could not hold out another fraction of a second the leopard relaxed. His boy came running up. The eighty-pound cat moved as if to revive, but the native found the knife he had thrown away in fright, and Akeley finished the beast.

It is knowledge gained from hardy adventure and grim experience that he puts into his mountings of animals and into his bronzes. Young elephants skylarking and playing with a football of clay; elephants charging in a mass, those in front with curled trunks and those behind with trunks straight out, still trying to get the wind—these groups are not romantic inventions but the finished notes of a naturalist who hunted for his own material at risk of life and limb, and then mastered an art for the sake of his science.

"JUNGLE FOOTBALL"

An unfinished study by Carl Akeley picturing a game which he has often witnessed in the wilds of Africa. The elephants make the ball out of earth from an ant hill and play their game with the enthusiasm of school boys



WILD ANIMALS IN MODERN ART

DENIZENS OF JUNGLE, FOREST, AND PLAIN PICTURED IN THEIR NATURAL HAUNTS

"THE OLD MONARCH," By Rosa Bonheur

One of the artist's favorite paintings, and one that satisfactorily represents the popular ideal of "the king of beasts." The demand for this picture has never diminished since its first reproduction half a century ago

WILD ANIMALS IN MODERN ART

"I RAN after animals in the wood and often lost myself," Rosa Bonheur once said to a friend, in speaking of her childhood. "I refused to learn my alphabet, but already had a great passion for drawing before I was four years old."

Rosa Bonheur was the daughter of a struggling artist. Some of her happiest hours were spent in her father's studio. As long as she held in her hands a pencil, a piece of charcoal, or a lump of clay she was content. Her father sent her to the Louvre in Paris to copy the works of the old masters. Art, at seventeen, became the aim and occupation of her life. One day she happened to make a study of a goat. She was so enchanted with the result that from then on she devoted herself to the painting of dumb creatures. She even had the courage to go daily for many months to the slaughterhouses and the horse fairs, where, in the midst of butchers and horse dealers, she studied her models. Seated on a bundle of hay, she would sketch from morning till dusk. As a protection from vulgar curiosity, she dressed in male attire, a habit which, when at work, she kept up for the rest of her life.

Courtesy Rudolf Lesch

"GIRAFFES," From a wood-block by Daaman Goldberg

It was in the Salon of 1841 that the young Frenchwoman attracted the attention of the critical tribunal of Paris by two little groups: one of rabbits, the other of sheep and goats. From this time she appeared in all the Paris exhibitions. The government commissioned her to paint "Plowing in the Nivernais" for the Luxembourg museum. For this now widely known study of oxen she received three thousand francs. The money went to pay her father's funeral expenses. Five years later, the exhibition of "The Horse Fair" in the Salon brought her universal renown. The adulation of the multitude became so oppressive that she sought retirement in a château on the border of the Forest of Fontainebleau. Here there was room for her to keep and care for all kinds of animals. Her collection included gazelles, deer, horses, bulls, cows, wild boars, lions, monkeys, various kinds of dogs, squirrels, ferrets, and an eagle.

"To be loved by wild animals, you must love them," said the greatest of women animal painters. "I believe in the good God and in his paradise for the just. I find it monstrous that animals should be said to have no soul." Of her lions she once wrote to a friend: "The bringing up of two lions takes much of our time. We find them more frank, more grateful—these wild beasts—than are most human beings."

Léon Gérôme, who dwelt chiefly on Oriental scenes, gave his imagination free play in treating his wild-animal subjects. "The Grief of the Pasha" is one of his most effective story pictures. The eminent French artist covered a wide range of jungle beasts, but had a particular liking for those belonging to the feline family.

The Dutch etcher E. van Muyden handles his tools vigorously and with evident affection for animals. Their natures, their habits,

In the Art Institute, Chicago

"THE GRIEF OF THE PASHA," By Jean Léon Gérôme

and their individual characters are the object of keen study and appreciation. There is sharp satire in a group of monkeys that he depicts making ridiculous caricatures of a painter's work. A proof of his versatility is "Two Lion Cubs," a beautiful bronze which shows his ability in the plastic art as well as in the graphic.

Richard Friese, most celebrated of modern German animal painters, became interested in the denizens of plain and jungle through hunting them in their native haunts. He put

In the Pennsylvania Museum, Philadelphia

"AT THE SUNRISE HOUR," By J. M. Swan

on canvas truthful and convincing records of his observation of wild life. His "Lion and Gazelle" is a masterpiece in composition and execution. "Brigands of the Desert" is typical of the freedom of his interpretation and the vigor of his brush. His death in 1918 closed a long career devoted to the study and portrayal of creatures of the wild.

Vigorous realism characterizes the work of Walter Kuhnert, "the Frans Hals of animal portraiture." He began as a painter of human portraits, but could not withstand his inclination to make likenesses of animals. Richard Friese was his master. Kuhnert first found his subjects by the roadside and in menageries and zoölogical gardens, and finally sought them farther afield in Africa and southern Asia, where he worked assiduously in forest and jungle. Kuhnert "has got inside the very skin of African life and draws one insensibly within the charmed circle." With fine fidelity to nature he shows the polar bear on Arctic floes, hairy tigers moving rhythmically along the snowy mountain lake, dancing flamingos at nightfall, a red fox on a moonlit hillside.

Briton Rivière, long known as one of England's most prolific painters of popular themes, combines with classic knowledge a deep love of animals. He is never satisfied with anatomical excellence alone, he penetrates into the inner consciousness of dumb brutes. His lions are proud, spirited creatures; even his swine, in their enthusiastic grubbing, have an integrity of their own.

John Swan, a frequent exhibitor at the Royal Academy, London, has made a very exact study of animals in pictures, drawings, and statues. Mr. Swan heads a rebellion against a harmful tradition—that of making animals attitudinize and assume an air of exaggerated sentiment. In his portrayals, he seizes upon the main characteristics, and makes a few lines suffice. His anatomical structures are flawless. He depicts with great skill the complexities of the animal body. The massive forms of the bones, the interlacing of the elastic muscles, the folds and creases of the skin are all understood and accounted for.

Arthur Wardle, born and bred in London, has been no farther afoot in his researches than the zoölogical gardens of his native city, but he has observed animals morning, noon, and night, at mealtime and in the quiet hours

of the afternoon siesta. His pictures show intuitive understanding of the thoughts and movements of wild beasts. Mr. Wardle has at his disposal the sure and rapid medium of pastel. The pastel chalks enable both drawing and painting to be done at one operation, and give simultaneously the color and tone required. The animal painter has to work at the fullest possible speed. His sitters will not obligingly pose for him. They are restless models, with sudden changes of attitude and unexpected movements. Mr. Wardle approaches his work with the inquiring spirit of the naturalist, coupled with

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"MATES," By G Wertheimer

the vision of the painter. His grasp of animal character is shown in "Leopard on the Alert," "Rhodesian Lion," "Polar Bear," "The Puma," "Himalayan Tiger," and many other well-studied pictures.

Will Simmons, son of the veteran American artist Edward Simmons, is a student of wild-animal life in many and varied phases. He works chiefly in etching, dry point, and water color. Whimsical humor is apparent in the drawing of two monkey friends with tails affectionately entwined, looking with wistful amaze toward a mammoth butterfly. There is fine interpretation in his plate "The Long Trail," a study of North American bison, gazing mournfully upon a comrade's bleaching skull, and in "Crossed Trails," a beautifully composed study of a puma.

Herbert Dicksee, English etcher, also comes of a well-known family of artists. He has spent nearly the whole of his career interpreting the minds and manners of creatures of the jungle. His output is as impressive in numbers as in subjective interest.

Charles R. Knight, well-known American painter of animals, made his first sketches when he was a child of five. He is a sculptor as well as a painter. His studio near Central Park breathes a life of devotion to our four-footed brothers. On the walls are beautiful paintings, large and small, of birds and animals. "Animals are a difficult study because one must deal with many types of psychology," says Mr. Knight. "No one painter understands all animals equally well. The true animal painter always comes at his work from the side of psychology. If you don't understand an animal's habit of mind, you can make all the anatomy right, but you will not truthfully represent his expressions, actions, poses."

For many years Mr. Knight has been associated with the work of the American Museum of Natural History, representing in their natural state animals of prehistoric times —dinosaurs, mastodons, saber-toothed tigers. He also finds time in his busy life to give lectures on animal painting to the students of the New York Art League. His recording of wild animals and their moods, whether in bronze or on canvas, are honest, vigorous interpretations, of impressiveness and beauty.

Courtesy Rudolf Lesch

"THE JUNGLE POOL," By Daaman Goldberg

"CROSSED TRAILS," Study of a puma by Will Simmons

"PERSEPOLIS," By Briton Rivière

Courtesy the artist

"LEOPARD ON THE ALERT," Pastel drawing by Arthur Wardle

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"DANGER," From an etching by Herbert Dicksee

"TIGERS DRINKING," From an etching by E. van Muyden

"THE LONE WOLF," By Alfred Kowalski

"WINTER," By G. von Maffei

"POLAR BEAR AND CUBS," By Richard Friese

© Frederick Warne

"A MOONLIGHT FORAY," By Walter Kuhnert

"THE UNATTAINABLE," From an etching by Will Simmons

THE WHITE ELEPHANT

BY E. M. DOLE

Queen Victoria probably never received a more sincere tribute than one paid her by a Siamese ambassador at the English court. "It is plain to see that the Queen is of pure descent," he declared, "because her bearing is as majestic as a white elephant's."

To the Siamese an elephant of abnormal coloring is the symbol of all that is wise and beautiful. They believe he embodies the divine spirit of a king or hero, and insures peace and prosperity to his owner. Kings crown him, priests worship at his feet, the people adore him and go to him for help in time of trouble. By right of priority all elephants of extraordinary marking belong to the king. Let a neighboring prince withhold one and he discovers that "having a white elephant on his hands" is a vexatious and burdensome business.

The word *phoouk*, as applied to the petted occupants of the royal stables, means "not dark," or varying from the regulation gray. Rarely has one been seen that is actually white. Flesh-colored elephants and elephants of reddish brown have been found. About fifty years ago the capture of a fine salmon-skinned specimen was heralded from the wilds. Preparations were under way for his spectacular advent into Bangkok when word came that the beast had died on the way, overfed by his enthusiastic captors. The king wept and refused to be comforted, for the dead elephant, so report said, had "blue eyes, soft white hair, pearly tusks, ears like silver shields, a tread like the sound of thunder, an expression meditative and tender."

Once, out of kindness of heart, two dwellers in the jungle washed a young elephant that had been mired and was coated with mud. And lo, his skin when cleaned was tan color, and they realized that the most desired of all good luck was theirs. They were ennobled, loaded with gifts, allotted grants of land, and exempted from taxation. The new-found treasure, doubtless much bewildered at the change in his fortunes, was floated down the river to Bangkok on a barge hung with crimson, he was fed on choice herbs and sweets, and he drank perfumed water. Flags and music marked his progress toward the capital, and the king and his court received him with bands and huzzas. The title of "Count" was bestowed upon him as he mounted his dais in the king's stables.

AN ELEPHANT PROCESSION IN STONE

In one of the public gardens of Bangkok a white elephant and his retinue of priests are memorialized by a Siamese sculptor

At present but three sacred elephants occupy the palace stalls. The most extraordinary one is brown-red with pink spots. Nowadays, if an off-color animal is secured he is shipped to Bangkok in a prosaic freight car, and his captor gets a moderate reward. The bulky figure of the holy elephant no longer appears on the national flag. Educated Siamese neglect to worship at the elephant pavilion. A university graduate rules Siam—old customs are giving way to new.

Some day a circus promoter may venture to repeat Barnum's historic offer. Barnum proposed to rent one of the freak elephants for a year and transport him across the water. He would have paid $250,000 for the privilege. Blocked in his effort to exhibit to the American people an authentic white elephant, he applied paint to the hide of a dark gray one and showed it throughout the United States to credulous crowds.

THE NORTH AMERICAN ELEPHANT

BY WILL SIMMONS

To-day we must import our elephants for circus and menagerie, but there was a time when we raised our own. Christopher Columbus found America too late for us to know them face to face, but one of them is named after him, "*Elephas Columbi.*"

These ancient American elephants are popularly known as mammoths and mastodons: they lived here long before the white man came, when a large part of North America was subject to the invasion of fields of sheet ice, making the climate cold, and changing the face of the land as it passed.

Before the Glacial Epoch lived the ancestors of these North American elephants, but they were more primitive types, and too little is known of them for an accurate description. On the real elephants, however, we have much reliable data. Several drawings and carvings of mammoths exist that were made by our prehistoric ancestors; for example, a portrait of a mammoth scratched on a piece of ivory, which, if not a perfect likeness, is a valuable clue to what these big beasts really looked like. Thomas Jefferson hoped that living mammoths might be discovered in the middle of the continent, and until recently it was thought that they might still be roaming in the interior of Alaska. But to-day it is safe to say that the last mammoth died many centuries ago.

Mammoths probably existed in great numbers, for their bones are common not only in America but over Siberia and Europe, as far south as the Great Ice reached, even to the Mediterranean. Mammoth tusks, or fossil ivory, have been found in such quantity as to be an article of commerce. In Alaska remains were found in a river bank of a monster whose fat was still fresh.

The northern mammoth, called "*Elephas primigenius*" (or "Firstborn"), was rather smaller than the present African elephant, but had very long incurving tusks. He was covered by a warm undercoat of wool, and over this wore a coat of long and shaggy brown hair. He seems to have resembled modern elephants much as the bison resembles modern cattle, with a similar shaggy

Courtesy American Museum of Natural History — From a painting by Charles R. Knight

THE AMERICAN MASTODON — He lived in the wooded plains and marshes left by receding glaciers. Sometimes his great bulk was fatal. Skeletons have been found where the immense brutes sank in bogs. Many bones have been discovered in Ulster and Orange counties, New York

Courtesy American Museum of Natural History — From a painting by Charles R. Knight

THE NORTHERN MAMMOTH ✣

The word "mammoth" has a curious origin. The Tatars of Siberia found huge fossils, but could not account for them. So, around them, they built a legend of a giant animal that lived underground and died when it saw the sunlight. This animal they called "earth-mouse," and their Tatar word has been Anglicized into our word "mammoth"

robe and a great mass of hair upon his forehead. Like the bison, he roamed in bands across the tundra, following the edge of the glacial ice, until in its retreat it reached the Arctic Ocean.

The great imperial elephant (or mammoth) lived earlier and farther south than the Columbian and "Firstborn." This, the largest of the prehistoric elephants, measured up to fourteen feet at the shoulders. Tusks have been found reaching thirteen feet in length, ten inches in diameter, and weighing two hundred and forty pounds apiece.

Compared with modern elephants, the American mastodons (another branch of the family tree) were short and stocky. Their tusks were heavy, their foreheads sloping, and, like the northern mammoths, they were covered with woolly hair, showing that they, too, lived in a cool climate.

A real giant was discovered in a dried-up swamp northwest of Newburg, New York, in 1845. The find caused a great sensation in its day. The mounted skeleton was taken on a tour of several cities, and then for many years was in the Warren Museum of Boston. The "Warren mastodon" is now in the Museum of Natural History in New York. Our illustration, made by Charles R. Knight under the direction of Professor Henry Fairfield Osborne, shows the great shaggy beast of yore just about to adventure onto a fatal slough.

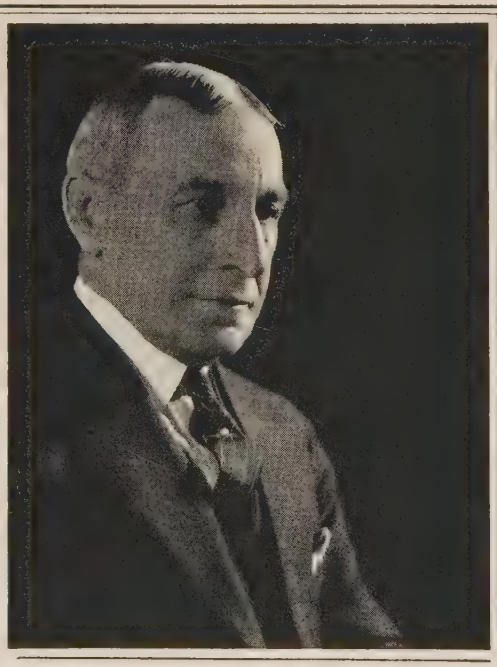
Just how the species came and went, to be replaced by other types more suited to conditions, is still unknown. It is easy to attribute the extinction of whole races, like the elephants, to an epidemic, or to some cataclysm of nature. But sudden events, on a large scale, are not in the rule of things, and it is better to consider extinction as a slow dwindling in numbers, becoming faster as the species grew more rare, until only in secluded spots a few individuals survive. Such is the case with the African elephant to-day, for he is of an earlier type than either the Indian elephant or the northern mammoth, and owes his survival to isolation in a remote territory. And to-day he is becoming rare. May he long withstand the high-powered rifle and the distance-defying automobile, else we shall soon be obliged to class him with the mammoths of yesterday!

CAPTURING AND TRAINING WILD ELEPHANTS

BY CHARLES MAYER

In the Malay Peninsula I am called "Sir Elephant." For twenty-five years I have been engaged in catching and taming wild elephants and other beasts of the Malay jungle. The Mentor has asked me to tell how I captured sixty Asiatic elephants in a single drive without the aid of trained elephants, and how I broke them for domestic service. There are two methods of capturing Asiatic elephants: driving into a stockade with the help of trained elephants, and driving on foot unassisted by elephant aides.

There is no comparison between the two methods; the former is a simple drive with men, who, at the proper moment, drop off the backs of the trained animals, slip a noose about a wild elephant's hind leg and fasten it to a tree. Driving on foot, at night, without the aid of trained elephants, is a dangerous and tedious job requiring an immense amount of patience and jungle craft. When once in the *keddah*, or trap, the captives must be taken out one by one to be broken.



HIS BUSINESS IS COLLECTING WILD ANIMALS

Charles Mayer, a New Yorker born and bred, has spent the greater part of his life as an animal merchant in the jungles of the Malay Peninsula. The outstanding feat of his career was the corralling of sixty elephants in a single herd. These animals were sold for exhibition purposes, or for service in lumber camps

As elephants always travel in cycles—that is, every four or five years returning to the same district—it is easy to calculate where to build the trap, and when a herd is located men are told off to keep them moving in a circle within a certain area until the trap is completed. In the dense jungles of Malay, vines and creepers bind trees and undergrowth together, completely shutting out the sun; everywhere is twilight. Progress is slow and difficult.

The work of building a *keddah* for so large a herd was prodigious. Trees about twenty-five feet in length and a foot and a half in diameter were cut down and dragged through the jungle for a quarter of a mile to the place I had selected. There they were planted five feet in the ground and braced with smaller trees so they could stand the pressure of the elephants when trying to lunge through. The posts were then bound with heavy twisted rattan ropes, and covered with vines and leaves. I took great care not to have the jungle disturbed in the vicinity, for, like all jungle animals, elephants can see very well at night, and there is always the danger of a stampede if they become suspicious. The whole thing, trap and wings, could scarcely be distinguished from the dense growth that surrounded it.

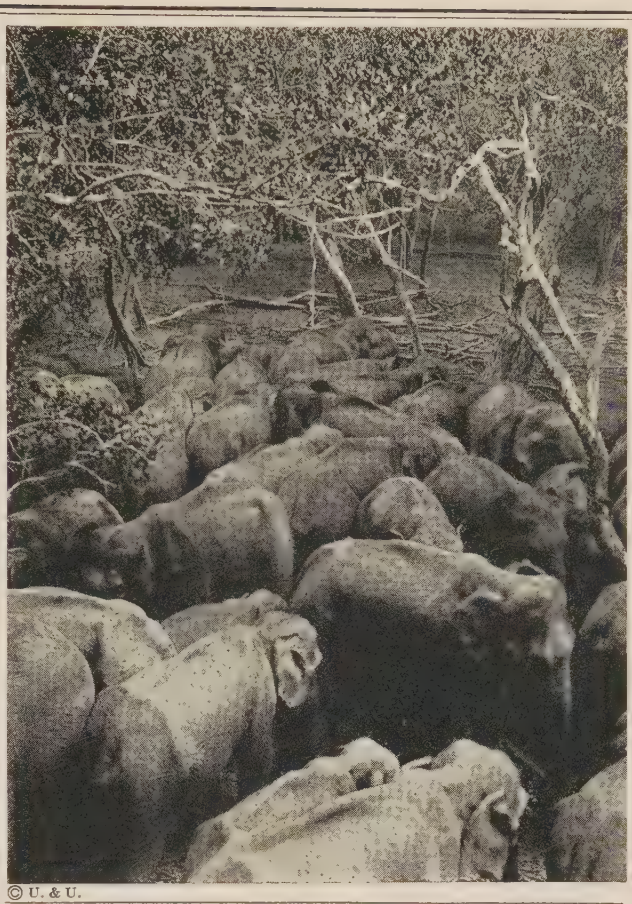
By the time the trap was ready, the herd I was after was about four miles away. I gathered the natives around me and explained all the details of the drive and assigned men to the various tasks. We split into two groups, to meet behind the herd. A man was stationed every few hundred yards in a tree to guide us. In a drive like this, the men who are directly behind have the easiest time, for they can follow the trails broken by the elephants. No lights can be used, and care must be taken to avoid the small elephants, which run about investigating the noise. If they see a man and give the danger signal, the entire herd stampedes. And then look out!

The drive I am writing of began with the men in a "U" formation. On my giving the signal, we in the rear started forward with the tom-toms banging. Soon we heard the elephants trying to get away from the noise, putting their huge bulk against the jungle growth. We stumbled on, guided by the calls of the men posted in the trees. At dawn we had advanced only a mile and a half. Men were posted, and we slept until late in the afternoon. What I feared happened late

that night: a stampede. A little elephant, straying from the herd, saw one of the men and ran back trumpeting danger. Then the bellowing herd came down on us. I jumped behind a tree, shouting to the men. One stumbled and fell, and, before I could shoot, a big bull elephant stepped on him and tore him in two, throwing the upper part of his body over his head and spattering me with blood.

Elephants, bellowing furiously, rushed past us, men screamed and scrambled for safety. The immense animals loomed up in the darkness for a second and then disappeared. In their excitement, they ran into large trees and were thrown back, only to charge blindly on again. When elephants stampede, their idea is to escape, not to charge, as many people imagine.

At last it was over. I called my men together, torches were lighted, and we looked for the injured. Three men had been killed and twelve hurt. We buried the dead, and sent the hurt back to camp. After a few hours' rest, we started off again in search of the herd. It was not difficult to find them, for they cut a swath in the jungle to the point where they stopped, five miles from the scene of the stampede.



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THE FIRST STAGE OF SUBJUGATION

A herd of wild elephants driven into a stockade in the jungle. Here they are put on reduced rations and allowed to go hungry. A few days of this treatment weakens them and makes them less vicious and more amenable to domestication

Again I posted guides in the trees. Every man was alert, and this time I decided that there should be no rest until the last beast was in the trap. Scouts had reported that the herd was slightly depleted, but, even so, it was the largest group of elephants that any of us had ever seen, much less driven. About midnight we approached the *keddah*, and suddenly the men went wild with delight, for above the uproar we could hear the calls of guides in the trees telling us that the head of the herd was in the runway.

The big beasts jammed in between the wings, heaving, struggling, and forcing those ahead of them into the trap. The walls of the wings groaned but held as the great bodies pressed against the posts. The shouts of the natives and the bellowing of the captive animals created a terrific uproar, but the sounds were music in my ears. I climbed up on the platform and looked down, and I could see nothing but a tossing flood of black that poured slowly from the runway into the trap. When the last elephant was inside, the ropes that held the gate were cut. The gate crashed down; bars were run through the sockets—the elephants were trapped.

On my platform, I shouted as loudly as any of my Malays. Torches were lighted and the men began dancing. I slipped to the ground and warned them against climbing up on the walls of the stockade, for I was fearful that the sight of the men and torches might enrage the elephants, and if they suddenly took it into their heads to charge the walls in a body, some of the posts might give way. I could hear the great beasts milling around inside the trap, bellowing and tearing up the jungle in an effort to find a way out. At dawn, I counted our catch. There were sixty elephants!

CLEARING A BAMBOO FOREST

Elephants are well suited to the work of clearing the thick jungles of India and Ceylon. Their huge bulk makes light work of pushing down trees and uprooting the underbrush. The keepers ride on the elephants' necks, guiding them with prods

The men, armed with long spiked poles, mounted to the running platform on the top of the posts, and the celebration was renewed. I stood there breathless, wondering how many of them in their excitement would fall off the platform into the trap, but none did fall, and they fended off the elephants with their poles.

We cut holes in the rattan webbing between the posts and enticed the small elephants to come out. There were several, and they soon became playful and affectionate. At birth they are just three feet high and weigh two hundred pounds.

The breaking of elephants, especially so large a herd, is a long, tiresome job. The hunter who kills and skins his catch has a simple task compared with that of the trapper who must not only take the animals alive and uninjured, but convey them through miles of jungle country to a port. Months of hard labor were before me; the success of the expedition was by no means assured, even though we had our elephants safe in the stockade. I knew it was also to be a great test in managing the native helpers. One elephant can create havoc in a few seconds if the keepers lose control. The first task in the breaking was the building of stocks where the elephants were to be held while they became accustomed to being near to man. Two rows of heavy stakes leading from the trap to the stocks were driven into the ground. At the end of the passage, and next to the trap, there was an enclosure, five by fifteen feet in size. The piles of the trap were removed from the entrance to this enclosure and bars substituted.

The elephants were put on short rations while in the trap, and by the time breaking-in began, though still vicious, they were much less dangerous to handle. As soon as all the equipment for breaking was ready, I instructed the natives in their work. With a select crew of men, I rehearsed all the details of what we were going to do and how we were going to do it. Finally, I ordered food placed in the enclosure and the bars drawn. The nearest elephant saw the food, sniffed, flapped his ears, and walked in. As soon as the elephant entered the small enclosure, the bars behind him were slipped to keep the others out. He ate the food so eagerly that he did not realize quite what was happening when the men put the knee and foot hobbles on him. These allowed him about one-quar-

ter of his normal step. Rattan ropes were fastened to his feet and drawn out through the bars. His trunk was secured so that he could do no damage with it.

When the elephant was secured by hobbles, foot ropes, and trunk ropes, the bars leading from the enclosure were removed. The foot ropes, fastened to the stakes, were loosened, and the elephant walked out. The men holding the ropes attached to the fore feet wound them around the two stakes ahead, and those holding the ropes attached to the hind feet wound them about the first stakes. In this way the animal was drawn forward, step by step, toward the stocks, while natives prodded him with poles. If he tried to bolt, he simply fell over.

The stocks were built in covered stalls. Each elephant was separate from the others, and was secured in a position that made it impossible for him to lie down or to move about. He could wiggle his legs and use and wave his trunk, but that was all. Here he stayed about ten days, during which time he was fed and petted by a man assigned to that particular job. The keeper would crawl over his back, rub him behind his ears, and give him food and drink. Soon the animal learned not to be afraid of the man or try to strike him with his trunk. Gradually he became more docile. Before long, ropes were again attached to his feet, and he was led out of the stocks. Eight or ten men held each rope attached to his legs, and his keeper was on his neck. Another crew of four men held the ropes that were fastened around his trunk at the mouth. Three men followed on each side with long rattans.

At first, in the excitement, he did not mind being beaten. The men on the trunk ropes led him about from right to left, while those holding the foot ropes stood ready to trip him if he tried to bolt. When he bellowed the whipping stopped. One bellow marked a surprising change in the animal. After this outcry, he was ready to acknowledge man as his master and do as he was told.

The fact that each elephant after he was tamed was instantly fed and petted helped him to forget about the old wild ways of the jungle. His schooling was brief, and he learned readily to turn, kneel, back, and pull. In recompense he was tied to a tree instead of being put back in stocks.

It took me eight months to finish breaking my biggest herd, and then, riding on the neck of the largest elephant, I led my catch through the jungle to port. A few months later I went to Singapore, and there I found that the feat of capturing, without the aid of trained elephants, the largest single herd ever taken had become the talk of the town.

THEIR "HAPPY HUNTING GROUND" TRANSFORMED INTO A WORK-YARD ✣

When once he submits to man the elephant becomes a gentle and willing worker. Here is a gang in the Siamese jungle rolling a teak log. Elephants push with the base of the trunk, about one foot below the eyes, and never with their foreheads, as commonly supposed

IVORY: MAN'S TROPHY FROM CAVE DAYS TO THE PRESENT

BY M. B. LEVICK

In the furthermost age of which we have record, man enters history bearing an elephant tusk as his trophy. The modern city dweller intent on showing his prowess goes off to hunt big game—and the "tusker" is the biggest prize of all. The luxury of our life to-day is rich in ivory, cunningly worked. So it was in the beginning: on ivory was scratched the first picture of the origin of which we know nothing. It is a vivid sketch of a mammoth, found in a stone cave in France. From that sketch to the paper cutters of commerce stretch centuries of development of a traffic of slaughter, with its trade routes and markets, its artists and artisans, giving to the successive capitals of the world great ivory statues, thrones of kings, and lacy baubles. The elephant, rated second to man himself among all the animals, is perishing to give man knife handles and billiard balls.

IVORY CHESSMAN

Presented to Charlemagne by Haroun-al-Raschid. It is now in the Bibliothèque National, Paris. The signature of the Arab craftsman who carved it is engraved under the base

Ivory is a material to fascinate the artist who works in it. But it is more: it is the tooth of a giant, and man finds self-flattery in shaping this trophy of strength and power to his own uses or amusements. Primitive man believed that he drew vital force from the elephant he killed. The belief still lurks in the mind of modern man.

Ivory, carved and treated as a precious substance, is found among the earliest treasures that archæology has brought to light—in Assyria and the East, in England, France, and Switzerland. Go back in Egypt as far as Tutankhamen, and then twice as far again, even to 7000 B.C., and you find ivory carvings. As Solomon had his ivory throne, so potentates lost to ancient history had their ivory palaces and chariots. Old chronicles tell enough to indicate that the supply of ivory in those days was vaster than that of modern times.

To-day, utility as well as art hunts down the elephant: his tusks have made myriad things—from chessmen for Charlemagne, to keys for pianos and tiles for mah-jong sets.

The tusk bearer is still comparatively plentiful in the mountain forests of central Africa, but even there he is dwindling fast.

Stanley found an abundance of ivory in the Congo in 1877, but not long ago an expedition from the American Museum of Natural History made its long and difficult way, by streams and trails known only to the native, into the green depths of the high Uele district, and found no ivory. Okondo, king of Mangbetu in Uele, received them courteously and was willing to sell his royal treasure of primitive carvings, and to put at the service of the scientists his artists, inheritors of an immemorial skill. These native artists, a selected group attached to the royal retinue, were idling in the sun or dozing in the shadow. Apparently there was nothing to do.

"Why?" the white visitor asked.

"There is no ivory," said the chief.

The museum expedition went on into regions deeper in the forest to purchase ivory so that the friendly chief's artists, in the elephant's own country, might show their skill.

African ivory is the finest. Not only are the tusks commonly larger than those of Asia, but they are stronger and smoother. His tusks are the elephant's upper incisor teeth, which nature has enabled him to extend and strengthen so that he may use

them for defense and to uproot vegetarian food. Although the tusks grow throughout the elephant's lifetime, their size and quality depend not on the size of the animal, but on his species, and on climatic conditions. A pair of tusks in the British Museum, which measures eleven feet five and one-half inches and weighs two hundred and thirty-six pounds, is from Africa; the largest Asiatic tusks weigh half as much, and the female elephant of Asia has, in general, no tusks at all. The proportion is about the same in the ivory coming into the market to-day; an African tusk of a hundred pounds is a good specimen.

Freshly cut African ivory has a warm mellow tint and a moist transparent appearance, with the characteristic grain delicately indicated. In time, it bleaches slightly and becomes more opaque. Asiatic ivory is whiter when new, but turns yellow and is coarser in texture. For two centuries, most of our ivory has come from Africa; probably this is true for the whole historical trade period of six thousand years. Indian ivory was much reputed in ancient times, but this ivory may merely have passed through India in shipping from Africa.

Although fossil ivory has been found all over the world, including large specimens in England, Russia is the chief source of supply.

A supply apparently as inexhaustible as coal exists throughout the tundra of the Siberian region. Some was so interred that it has been preserved in its fresh state and is like the live ivory from fresh killings, but much is rotten and discolored and unfit according to present standards. Workers in ivory prefer not to use it. However, they may in time become less particular, since live ivory, which reached its height of production in the middle of the last century, is becoming scarcer every year.

Unlike bone, ivory requires no preparation for working; its marvelously finished surface is ready for the tool of the artist or artisan. It has a natural elasticity despite its hardness. Riding whips have been made from delicate spiral cuttings. Among the lost arts is the ancient Greeks' method of softening it for easier carving and then hardening again the finished piece. The African native knows how to straighten tusks that are too curved or twisted to permit of economical use: he steams them over open fires, encasing them in the green trunk of a banana tree. This is commoner in some regions than in others. From the western section of Africa comes a harder variety of ivory than from the eastern section. Each has its uses. The hard is best for some commercial purposes; the artist prefers the softer. The native who has set out to make a great trumpet chooses hard tusks that have a large central cavity.

IVORY CORONATION THRONE

This chair made of natural tusks measures over eight feet in height and three feet in width. It was first used at the coronation of King Christian V of Denmark, in 1671

The term ivory is also applied commercially to the tooth substance of smaller animals—the hippopotamus, walrus, narwhal, sperm whale, and some wild boars. These serve to furnish small articles, though they may never have been within thousands of miles of Africa. There is also a vegetable ivory, a nut from South America; and chemical imitations of the genuine substance are manufactured for many uses.

Until the opening of the Congo trade, when Antwerp began to assume importance as an ivory center, London handled the bulk of the ivory import trade, and all the great centers of the ivory industry for ordinary objects of domestic use were in England. To-day, America, France, and Germany produce piano keys, cutlery, brush handles, and toilet ware, as well as the many toys, ornaments, and curiosities, in whose fashioning India, China, and Japan also compete.

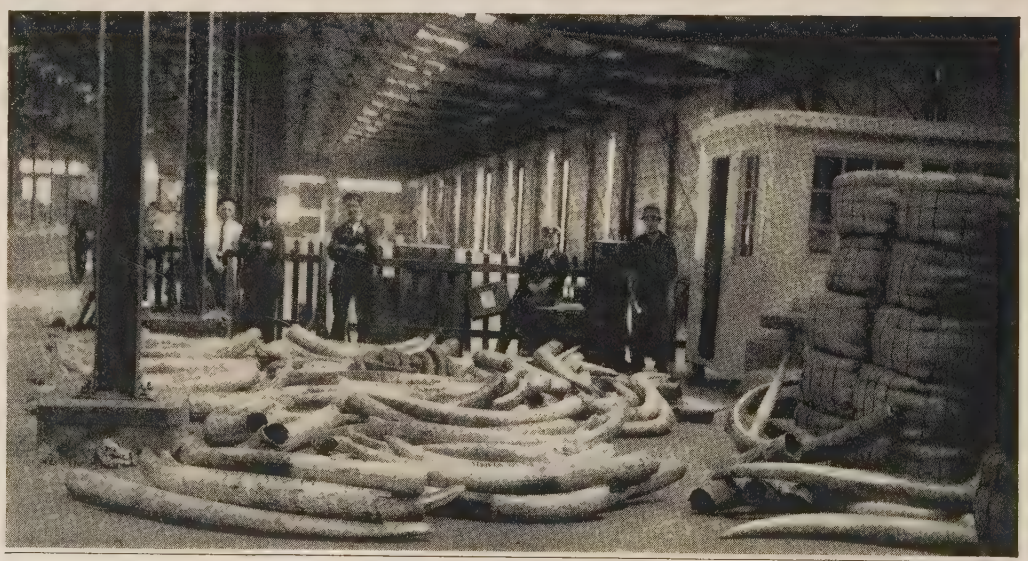
The very finest ivory is reserved for the making of billiard balls, which must be of a hard and even density. Three or four of them are cut from the center of a fair-sized piece.

The heads and tails of these pieces are used in making piano keys, and the sections from which the spheres have been cut are sent back to India to become women's bangles. No particle of ivory is wasted; even the dust is used for polishing or in the manufacture of India ink and ivory-black pigment.

In the world of art, ivory carving has a distinctive record. It is the only art which has an unbroken sequence of production throughout history. From the Stone Age it traces down through the early Eastern civilizations. Of the things that men may have cherished in the Dark Ages their ivories remain to bear witness. From the decline of the Roman Empire in the fifth century up to the Gothic revival in the eleventh and twelfth centuries the chief remaining art relics are the ivory carvings. Byzantine and early Christian art furnished splendid examples, now in our museums. The period following the Renaissance marks the beginning of a more commercial period in the craft of ivory carving in Western civilization, and from that time there has been gradual degeneration.

At the time of the opening of the Congo, Belgium, by means of exhibitions and prizes, sought to encourage her artists to take up the use of ivory as a medium for their efforts. Sufficient interest was created to set the ball rolling, and to-day beautiful and interesting work is beginning to appear at all European exhibitions. Four hundred Mangbetu ivories brought to this country from the Congo in 1915 are now on exhibition in the American Museum of Natural History, New York. Mr. Herbert Lang, one of the party responsible for gathering these amazing examples of the art of one-time cannibals, declares, "The carvings of the Mangbetu show such technical perfection that the use of a lathe and other modern instruments suggests itself. After much consideration, they work without tracing a plan or indicating divisions, although apparently they have a fair idea of the final form. The tusk is trimmed with a hatchet exactly as if it were hard wood. With an adz they shape the ruder outlines. An indented blade serves as a saw to cut the deeper moldings. The finer, ornamental features are carefully carved by variously shaped tools; and, finally, the whole is smoothed with the sharp edge of a knife. Foliage from various trees, containing fine crystals of silica, is used like sandpaper: thus with a moistened leaf they produce the polish which so heightens the beauty of these ivories.

"At the death of a ruler, barbarian custom demanded immediate destruction of all of his property. So it happens that only recent objects are found at the royal headquarters, and the Museum party was fortunate that, because of some superstition, the famous Okondo, last of these kings, was willing to part with the best he had, ordering other objects to be made by his most skilled artists."



IVORY TUSKS READY FOR SHIPMENT ✣ The restrictions on the exportation of ivory from Africa are becoming more stringent. First, no elephant can be killed except by a hunter having a government license; then, no tusk can be exported unless it bears the government stamp

Courtesy Herbert Lang and the American Museum of Natural History

THROUGH THIS CARVED IVORY TRUMPET THE KING OF MANGBETU SUMMONS HIS SUBJECTS TO FESTIVALS AND DANCES

NEGRO CRAFTSMEN OF MANGBETULAND, IN THE HEART OF AFRICA

The ivory tusk is roughed out with an ax, and the design is then carved with other hand-made tools. The finished work is polished with leaves having a grain like fine sandpaper

THE ZOO NURSERY

BY DR. W. REID BLAIR

Chief Veterinarian New York Zoölogical Park

Photographs by Elwin L. Sanborn, supplied by New York Zoölogical Society

When it's Maytime it's stork-time in the New York Zoölogical Park. To Keeper Quinn, who has charge of the herds of elk, European red deer, fallow, axis, and Asiatic deer, May is the month of mingled joy and anxiety, with congratulations always welcome and in order. This keeper's success with deer babies has been such that, with but one or two exceptions, the numerous animals comprising these herds have been born in the Zoölogical Park, and, in addition to those now here, many have been sold to other collections throughout the United States.

It was formerly believed that bears would not breed in captivity, but that was before the establishment of our great New York Zoölogical Park, where modern methods of confinement and care have disproved this notion—as well as other erroneous impressions concerning wild animals.

Cache, a female Russian brown bear, has presented the park with many litters of cubs, usually in perfect form. She was an ideal mother in all respects, and maintained discipline by occasional vigorous cuffing with her strong right paw.

THE ZOO'S FAMILY DOCTOR

Dr. W. Reid Blair, veterinarian and pathologist of the New York Zoölogical Park for the last twenty-two years. Dr. Blair has assisted at the birth of innumerable wild babies, and performed every sort of professional service, from treating monkeys for colic to lancing the infected gum of a 3,500-pound rhinoceros. During the World War he served on the staff of General Pershing as chief veterinarian of the A. E. F.

Czarina, a Syrian bear, is another good mother, and one from whom much of our knowledge concerning the ways and manners of cubs has been gained. The bear cub at birth is a helpless little creature, only eight to nine inches long from the tip of its nose to the end of its much abbreviated tail. It weighs only about fourteen ounces, and the body is covered with short gray hair of exceedingly soft texture. The ears and eyes are tightly closed. Bearing in mind that an adult of the species weighs from four hundred and fifty to five hundred pounds, it can readily be seen how ridiculously small is a bear cub. Its size is much less in proportion than that of the young of any other mammal, with the possible exception of the kangaroo or some other marsupial. The cub represents about one five-hundredths of the mother's weight, as compared with a fawn representing about one thirtieth, a young puppy one twenty-fifth, or a human baby one twentieth of the mother's weight. But in these tiny creatures we see a wise plan of Nature. The cubs are born during the winter, usually in January, while the mother bear is denned up and in a hibernating state, and the cubs are suckled for about three months before they make their appearance outside the cramped quarters of the den.

Of all our wild animal babies, there are none quite so popular as the little bear cubs when they emerge from their den in the first warm spring days, during the latter part of March or the first of April. From this time on the cubs' life is given over to play and the general enjoyment of life. It is doubtful if any other wild animals have the same fascinating power to amuse our millions of visitors, both young and old.

Our Syrian bear, Czarina, once gave birth to two cubs in an exposed corner of her den. For some unaccountable reason, she had for years avoided her sleeping compartment. The arrival of her babies during the very cold January days presented to us an unusual problem. It seemed that the helpless little creatures would surely perish. Since we could not induce Czarina to go into the sleeping compartment, which was nicely fitted up with clean straw, the next best thing to do was to build a shelter over the mother and cubs. Boards were fastened against the bars at the corner of the cage, and then we proceeded to house Czarina in

DINNER TIME IN THE BEAR PITS

Bear cubs are the most popular wild animal babies in the zoo. At birth they are helpless bundles of fur weighing only about fourteen ounces. At the age of three months they begin to look on the gay side of life, and from that time on devote most of their days to play

by building a roof over her, and boarding up the front of the triangle. A waterproof covering was afterward added, and Czarina appeared well satisfied with these arrangements. She remained thus confined until early in April, when the young emerged from the house. The front of her house was then removed, and late in April the entire structure was taken down.

One of the handsomest babies of any zoo is a six- to eight-pound baby tapir. Its color is entirely different from the sober gray hue of the mother tapir, nature having decorated this tiny little creature with a bewildering number of light stripes and dots upon a dark chestnut background. At the age of six or seven months these markings gradually disappear. The mother tapir is a proud but docile parent, and never takes offense at the keeper, who loves to "show off" the baby to admiring visitors.

Of all the exasperating mothers in the zoo family, I believe the handsome lioness Judy is entitled to be "crowned." Last year she presented the collection with three fine babies, to the delight of the keepers and others. Judy, however, considered this a huge joke on everybody, including herself. Even on the first day of her babies' arrival she proceeded to amuse herself with them, instead of doing as a dutiful mother should—stay in her maternal bed and nurse them. She insisted on carrying them out to the front of her cage to exhibit them to visitors. When they cried she would lift one of them up by the scruff of the neck, or even by the tail, swing it about, deposit it on the floor, and bat it about with her paws, and otherwise mistreat it. A keeper was placed on guard, but in spite of everything that could be done the cubs could not be saved, and they finally died from sheer exhaustion and neglect. Judy exhibited not the slightest degree of concern or remorse.

In sharp contrast to Judy, our lioness Cleopatra, who lived for many years in the park, was an ideal mother in every respect, and she successfully raised a number of litters of cubs. In some cases large dogs or goats are engaged in anticipation of the necessity of providing foster mothers for neglected or orphaned lion cubs. At first the dog may be uneasy at the somewhat rough foster children, but they gradually grow fond of each other.

Someone has said that the hippopotamus was "plain-looking," but surely such an observer was referring to an adult hippo, and had never had the opportunity of studying the features and conformation of a few-hours-old baby pygmy hippo.

Of all the hundreds of wild animal babies I have seen ushered into the Zoölogical Park, I cannot recall a single one that to me, or to the mother, appeared really homely; but, of course, some are better looking than others, while some babies, like the axis deer fawns and South American tapir, are positively

CONGRATULATIONS ARE IN ORDER ✣

A zebra mother proudly examining her two-hour-old offspring. Apparently she is well pleased with him, though the new arrival seems a bit unsteady on his stilt-like legs. The mother zebra's recovery from giving birth is astonishingly quick

handsome. I will modify that statement, and except the Tasmanian Devil baby, which recently was on exhibition in the Small Mammal House. I feel sure that the mother Devil, while she herself could hardly qualify in a beauty contest, must have been greatly disappointed when she first saw her offspring, and must have exercised a considerable degree of charity in deciding to keep it.

Some of our wild animal babies, like many of the deer, sheep, and goats, are able to follow at the side of their mothers half an hour after coming into the world, while others, like the camel, need assistance, and must be lifted to the mother, in order that they may nurse. However, after two or three meals, the baby camel is capable of navigating in its uncertain and ungainly way.

Occasionally we are obliged to foster some helpless wild animal baby when the mother has abandoned it because of illness, or as the result of some physiological change in the function of the milk-secreting glands. This the keeper must adopt and bring up by hand, if there is no mother of the same species to adopt it. Armed with a nursing bottle filled with modified milk or a patent baby food, properly diluted to the peculiar needs of his charge, the keeper becomes a nurse in earnest, and often a most successful one. In fact, many of the wild animals exhibited in the Zoölogical Park were born there, and are bottle-fed babies now grown to maturity through the intelligent efforts of their keepers. The keeper must not only take care of the deserted foundling, but he must also take care of the orphans acquired by purchase, often young animals only a few weeks old. These frequently grow up strong and vigorous.

Among the rare wild babies born in the Zoölogical Park are the chimpanzee, giraffe, eland, camel, zebra, Rocky Mountain sheep and goat, and Siberian tiger. In the kangaroo colony more than fifty kangaroos and wallabies have been bred, until to-day the park has the finest collection of these interesting marsupials or pouched mammals to be found in captivity. As a result of Keeper Riley's close observation we have learned much concerning these remarkable animals, and particularly concerning the matter of the kangaroo's birth, which has remained somewhat of a puzzle to zoölogists until recent years. The young are born in a comparatively rudimentary condition, and are sheltered during their later development in a pouch, called the "marsupium," which is a fold of skin on the abdomen of the mother. A kangaroo at birth weighs about twenty grains, is only a trifle more than an inch long, and not much thicker around than a lead pencil. It is a tiny, pinkish, naked mass, and, with the exception of the perfectly formed front legs, bears but slight resemblance to the adult kangaroo. It is by means of these front legs that it finally succeeds in propelling itself to the pouch, where it undergoes its more mature development, and

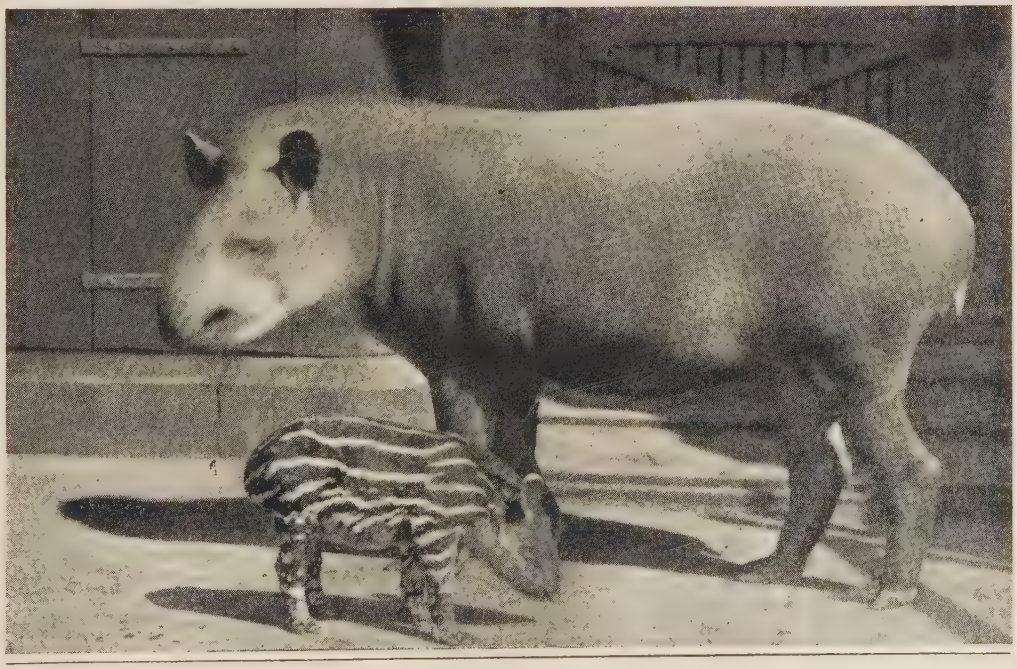
where it remains attached by its mouth to the mother's udder for several months. It is completely developed and ready to leave the pouch after six months, when it is permitted to shift for itself. It continues, however, to use its mother's pouch for a longer period as a safe haven in case of fright.

All the babies of the elk and deer family are more or less covered with white spots at birth, but, with the exception of the axis deer, these spots fade out within a few months. The axis deer carry their brilliant white markings throughout life. As soon as the fawn is born and gets upon its feet, it is guided by its mother to a clump of bushes, leaves, tall grass, or even to a crevice in a rock, where the mother forces it to lie down, and there it remains concealed for the first twenty-four hours. The fawn lies like a dog, with its nose to its tail, and will not stir or lift its head the whole of the day. It might be supposed that such a brightly colored animal would be very conspicuous, but this is far from being the case; save when it moves, few animals are more difficult to see in a forest. The color of the skin harmonizes with the dead leaves and grass, while the white spots are indistinguishable from the little flecks of light caused by the sunshine filtering through the leafy branches. The mother, however, although she separates herself from the young fawn, does not lose sight of its welfare, and is ready to go to its aid in case of need. The elk mother is particularly brave in the defense of her offspring.

Mountain Sheep Hill, with its thriving families composed of African aoudads, Sardinian mouflon, and Himalayan tahr, is well worth a visit just to sit on a bench and watch the happy antics of the tiny young kids as they run and jump about the rocks. These wild babies are prime favorites with the thousands of school children who visit Bronx Zoölogical Park during the spring months.

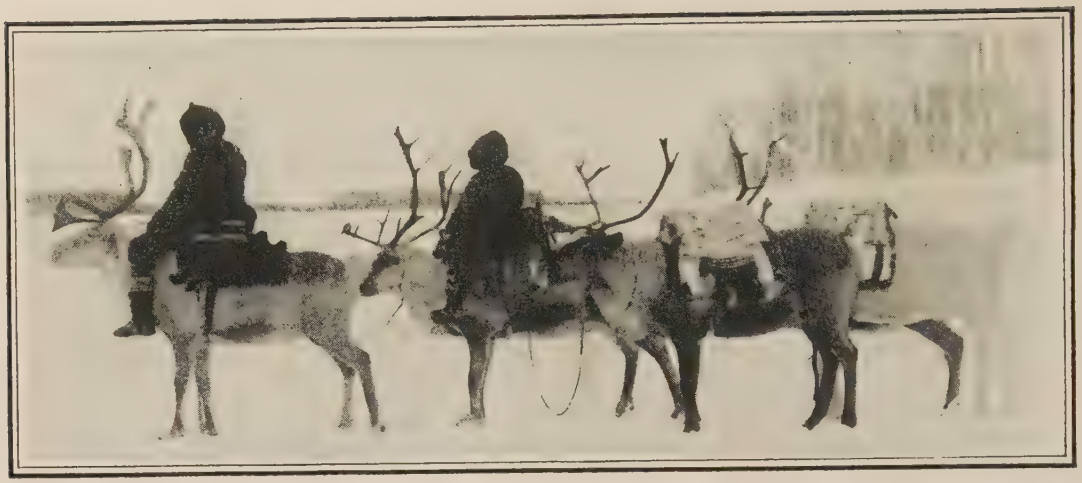
One of the most interesting babies born in the park was that of a Japanese red-faced monkey.

Once five baby lemurs were born in the Monkey House within a period of two days—an unprecedented event, which naturally crowded the facilities of the nursery. On the morning of the second day the keeper found that one of the mothers had deserted her baby, and that another had adopted it, caring for it with her own, carrying one in her arms in the usual way, and the other on her back, without a shadow of partiality.



BOTH DOING NICELY, THANK YOU! ✣ ✣

A South American tapir mother keeping a watchful eye on her eight-pound baby and trying very hard not to appear too enthusiastic over the great event. The mother's coat is a somber gray, but the young is born wearing a brown coat covered with white stripes and dots. This christening dress disappears after six or seven months



STRANGE BEASTS OF BURDEN

Solving the Transportation Problem in Far-away Lands

Ungainly as these methods of locomotion appear to Western eyes, they are well adapted to conditions in the countries where they are employed. The withers of a Siberian reindeer can scarcely be called as comfortable as a seat in a limousine, but reindeer feet can go like the wind over snows that would stall a high-power engine.

Burma ladies take their afternoon drive behind a pair of leisurely oxen. The turbaned cartman guides his team with a long thin pole, poking the right flank or the left, according to the direction in which he wishes the animals to go.

The camel was one of the earliest animals trained as a burden bearer. He can carry five hundred to one thousand pounds on his back, and go twen-

ty-five miles daily for several days. In the desert stretches of India camel carriages are the most popular method of rapid conveyance. Teams of small Indian bullocks are as common as horses in country districts.

The Asiatic elephant when domesticated will draw any load willingly, though he prefers to push with the base of his trunk rather than to pull with his

shoulders. In Siam he substitutes for the motor truck.

In the Philippines, plows and carts are hitched to the water buffalo, or carabao. This clumsy domestic pet likes swampy ground and does his work well so long as he is allowed to take a mud bath every two hours or so.

The water buffalo is highly valued in the Asiatic rice fields.

When Abraham Lincoln chose his Secretary of State

WHEN the news of Lincoln's nomination was received at Wm. H. Seward's home in Auburn, N. Y., it is said that the carved lions on his gate-posts shed salty tears. At least Seward said to his wife: "He will need me, but I will not serve under him. I must be at the head or nowhere."

After the convention Lincoln journeyed East. He telegraphed he was coming and Seward was at the station. The carriage was waiting, but Lincoln asked that it be dismissed, and, carrying his own carpet bag, he walked at Seward's side through the dusty streets of Auburn—a queer looking pair.

As Seward walked ahead into the house he said, "We have misjudged this man. He is the greatest man in the world."

From that time on to the day of Lincoln's death, Seward served his chief with all of his ability.

This striking picture of Lincoln is only one of many which appear in

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THE MENTOR

Statement of the Ownership, Management, Circulation, etc., required by the Act of Congress of August 24, 1912, of The Mentor, published monthly at Springfield, Ohio, for April 1, 1924. State of New York, County of New York, ss. Before me, a notary public in and for the State and county aforesaid, personally appeared Lee W. Maxwell, who, having been duly sworn according to law, deposes and says that he is the President of The Mentor, and that the following is, to the best of his knowledge and belief, a true statement of the ownership, management (and if a daily paper, the circulation), etc., of the aforesaid publication for the date shown in the above caption, required by the Act of August 24, 1912, embodied in section 443, Postal Laws and Regulations, printed on the reverse of this form, to wit: (1) That the names and addresses of the publisher, editor, managing editor, and business manager are: Publisher, The Crowell Publishing Company, Springfield, Ohio; Editor, W. D. Moffat, 331 Fourth Avenue, New York, N. Y.; Managing Editor, W. D. Moffat, 331 Fourth Avenue, New York, N. Y.; Business Manager, None. (2) That the owner is: (If the publication is owned by an individual his name and address, or if owned by more than one individual the name and address of each, should be given below; if the publication is owned by a corporation the name of the corporation and the names and addresses of the stockholders owning or holding one per cent or more of the total amount of stock should be given.) American Lithographic Co., New York, N. Y.; Bankers Trust Company, Trustee for Anna Wright Hazen, New York, N. Y. Bankers Trust Company, Trustee for Ella Gardner Hazen, New York, N. Y.; Bankers Trust Company, Trustee for Dorothy Hazen Soest, New York, N. Y.; G. H. Buek, New York, N. Y.; Employees' Savings and Profit Sharing Pension Fund of The Crowell Publishing Company, New York, N. Y.; Gardner Hazen, New York, N. Y.; George H. Hazen, New York, N. Y.; Gertrude B. Lane, New York, N. Y.; Henry K. Pomroy and H. Arthur Pomroy (both residents of New York, N. Y.), referred to on the stock list as Pomroy Bros., New York, N. Y.; Anne Payne Maxwell, New York, N. Y.; Post Securities Corporation, New York, N. Y.; Publication Securities Corporation, New York, N. Y.; Mrs. Margaret R. Thompson, New York, N. Y.; Samuel Untermeyer, New York, N. Y. (3) That the known bondholders, mortgagees, and other security holders owning or holding 1 per cent or more of total amount of bonds, mortgages, or other securities, are: None. (4) That the two paragraphs next above, giving the names of the owners, stockholders, and security holders, if any, contain not only the list of stockholders and security holders as they appear upon the books of the company but also, in cases where the stockholder or security holder appears upon the books of the company as trustee or in any other fiduciary relation, the name of the person or corporation from whom such trustee is acting, is given; also that the said two paragraphs contain statements embracing affiant's full knowledge and belief as to the circumstances and conditions under which stockholders and security holders who do not appear upon the books of the company as trustee, hold stock and securities in a capacity other than that of a bona fide owner; and this affiant has no reason to believe that any other person, association, or corporation has any interest direct or indirect in the said stock, bonds, or other securities than as so stated by him. (5) That the average number of copies of each issue of this publication sold or distributed, through the mails or otherwise, to paid subscribers during the six months preceding the date shown above is—— (This information is required from daily publications only.) Lee W. Maxwell, President. Sworn to and subscribed before me this 27th day of March, 1924. Mary L. Walker, notary public, New York County, N. Y. (My commission expires March 30, 1925.)

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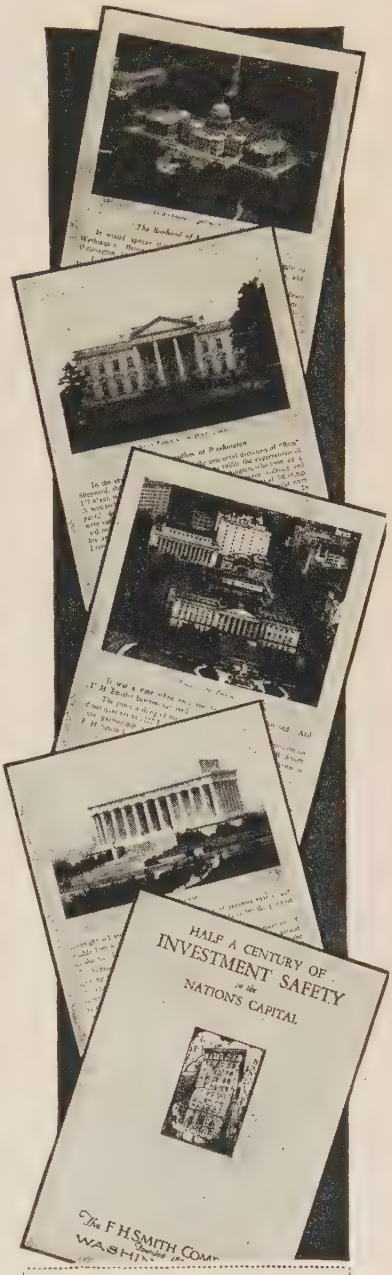

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Are you sure that you speak and write correctly? If you are like most people you are making mistakes every day which hurt more than you know. If you would be sure of yourself in every situation you must be certain that your English is faultless.

EVERY day, every minute you are engaged in an effort to make people think favorably of you. It makes no difference who you are, or what your position is, you want to advance, you want to step forward and upward. What you use most in this unceasing effort to establish and improve yourself is the English you speak and write. Every time you speak or set pen to paper you create either a favorable or an unfavorable impression of yourself upon others.

Polite society is a harsh taskmaster. It does not permit the slightest relaxation of its rigid commands. And one of the most important customs is the use of clear, concise, correct English. Above all is demanded correctness. And it is very easy to fall into error, for English has acquired thousands of foreign words and phrases that make it a snare for the careless. Clothes and manners are veneers that may gain you some favor for a little time. But your language reveals you as in the searching glare of a calcium light.

A Remarkable Invention

It was long ago proved that the old system of teaching English in schools was inadequate, for upon actual test it was found that the vast majority of men and women are only 61% efficient in their knowledge of English. For many years educational experts sought for some method that would overcome this deplorable condition. But no one ever came forward with an easy method of learning correct speaking and writing until Mr. Sherwin Cody, who is perhaps the country's best known teacher of practical English, invented a remarkable method that enables any-one to improve his speech in only 15 minutes' study each day.

Mr. Cody's invention is so amazingly simple that it is practically automatic. It accomplishes the mastery of English with astonishing rapidity. It is called the 100% Self-Correcting Method. This astonishing invention upsets all the ancient wornout standards of teaching. The useless rules and hard-to-remember, impractical definitions of the old system were so cumbersome and unwieldy that they actually retarded progress. Mr. Cody dispenses with all of them. Instead, he concentrates on the main essentials and arranges them so that fifteen minutes of your time each day soon gives you as thorough a command of grammar as those who spend years to perfect their knowledge.

SHERWIN CODY

Mr. Cody's remarkable invention does away with every uninteresting and monotonous exercise characteristic of the old methods. It is this feature that has called forth the highest praise from the best educational experts. This system so firmly fixes the habit of correct English in your mind that you can never forget it. It concentrates on your own errors—does not bother you about the things you positively know. And once you have formed the habit of using perfect diction, perfect pronunciation, and perfect grammar, you will *always* use them.

How People Judge You

Those who do not know you intimately can judge you only by what you make them think you are. The impression you make depends upon what you say and how you say it. If your English is poor, lifeless, honeycombed with mistakes in grammar, pronunciation, and diction, people will assume that you are lacking in culture and breeding. But if your language is correct in every detail, it will be much easier for you to be at ease, no matter where you are.

For that reason you should very carefully correct any mistakes you discover in your conversation and letters. But you probably are unconsciously making errors every day. These errors are the more dangerous because not only do they make you lose position, not only do they cause unfavorable impressions, but as you do not know what they are you go right on making them. Cultured people quickly recognize the slightest fault in English, and unless you are sure that your English is absolutely faultless, you will always be ill at ease and self-conscious. If you would become fully successful you must stop making these errors. You can not hope to attain all your ambitions until you are able to show yourself in the best light at all times.

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THE MENTOR

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THE OPEN LETTER

THE keynote of The Mentor is service. The Mentor itself, with its informing articles and attractive pictures, is not *all* that we give our readers. We also give personal assistance in the way of advice, suggestion, and information. You want to be guided in courses of reading? You want to know facts in addition to those supplied in The Mentor pages? You want to know where and how to get pictures and books? You want to know hundreds of things that are suggested by The Mentor articles? If so, write to us. At our command are reference libraries, the great book establishments, the art shops and museums—and, back of all, the knowledge, judgment, and taste of the men and women who are associated with The Mentor in an advisory capacity. All this is at your service as a subscriber to The Mentor. You have only to ask for it.

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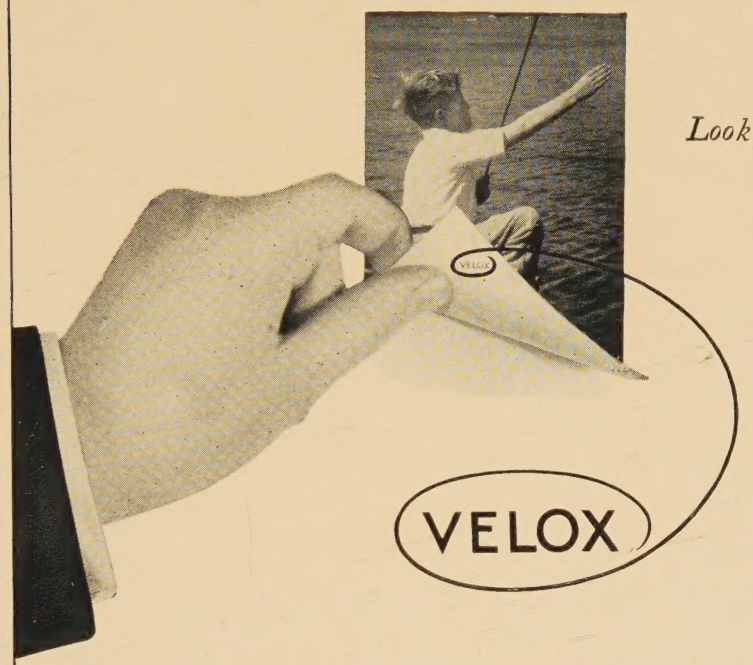
There is one important point, however, that we want to drive home here. The purpose of The Mentor service is to help readers by giving them information about the interesting and important things in the various fields of knowledge. I want to make this point clear, because there are three kinds of questions that have been growing in number of late—none of them in the nature of just and worthy service. One kind is the question plainly taken from some examination paper; the second kind is a request for professional advice—medical, legal, or financial; and the third is a "trick" question, put with the apparent purpose of puzzling one. It is obvious that we do not give honorable service to readers by supplying students with answers to questions on their examination papers; and of course we cannot give medical, legal, or financial advice. It is also obvious that no purpose is served by helping someone work out the solution of problems taken from a puzzle box.

✣ ✣ ✣

Come to us with any question that calls for worth-while information. We want to be of assistance to you in all matters of knowledge that will really benefit you. Our daily correspondence tells us what The Mentor and its service has come to mean to many readers: "I have been a subscriber to The Mentor from the first issue," writes one, "and I feel I could not do without it." Others write: "It is delightful," "It is worth while," "It is unique in interest," and, best of all, many write, "It helps me." That means most to us. It is a great satisfaction to know that The Mentor helps so many. If you have not tried The Mentor service, write to us when you want advice, suggestion, or information.

W. D. Moffat
Editor



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Modern Travel in the Ancient East—

THE shortest route between Tokyo and Peking, the two great capitals of the Orient, is by way of the South Manchuria Railway through Chosen (Korea) and Manchuria. Both these countries have their own distinct appeal to the traveler and business man, and no Oriental trip is complete without a visit to them. The trains are equipped with the same comfortable Pullmans and dining cars to which American travelers are accustomed at home.

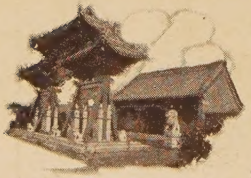
Chosen (Korea), the "Land of Morning Calm", is rich in relics of antiquity. Seoul, the capital, is a city of many palaces, temples and storied gateways.

Manchuria is not only the scene of important developments—new cities, modern industries, scientific achievements and vast agricultural areas—but there is in this old land of the Manchus a wealth of unforgetable beauty and historic interest.

The South Manchuria Railway connects with the Japanese Government Railways' sea ferry at Fusan, Chosen. Connection is made with the Chinese Government Railways at Mukden, Manchuria. At Changchun, north of Mukden, is the junction with the Chinese Eastern Railway, which in turn connects with the Trans-Siberian.

Distances Between Principal Cities

Tokyo to Shimonoseki	24	hours
Shimonoseki to Fusan	11	"
Fusan to Seoul . . .	10	"
Seoul to Antung . .	11	"
Antung to Mukden .	8	"
Mukden to Changchun	6	"
Mukden to Dairen . .	8	"
Mukden to Peking . .	23	"



American Consulate at Mukden

Your Host and Guide

SOUTH MANCHURIA RAILWAY

Manchuria in Motion Pictures

The New York office of the South Manchuria Railway Company has two reels of pictures showing the intermingled Oriental life and modern development of Manchuria. This film, requiring about a half-hour to show is made for the standard American machine. It will be lent to organizations or societies free of charge, except transportation cost. If you wish to borrow this film or if you wish free travel literature concerning Manchuria and Chosen (Korea), write to South Manchuria Railway Co., 111 Broadway, New York City.